

Mr. Ron Davies
Ogden Martin Systems of Indianapolis, Inc.
2320 South Harding Street
Indianapolis, Indiana 46221

Re: Significant Source Modification No:
097-10550-00123

Dear Mr. Davies:

Ogden Martin Systems of Indianapolis, Inc. applied for a Part 70 operating permit on May 31, 1996, for a municipal waste combustor facility located at 2320 South Harding Street, Indianapolis, Indiana 46221. An application to modify the source was received on January 19, 1999. Pursuant to 326 IAC 2-7-10.5 the following are approved for construction and modification at the source:

Installation of infectious waste handling equipment and the burning of infectious waste along with municipal waste at the municipal waste combustor facility.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of operation pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This proposed Significant Source Modification has limited the potential to emit from the burning of the medical waste to thirty-nine (39) tons of NO_x per year. The thirty-nine (39) ton per year NO_x limit is equivalent to 16,180 tons of medical waste per 12 consecutive month period to be reported on a quarterly basis before the NO_x pollution control system is installed at the facility. The amount of medical waste that may be combusted at the source may increase to 21,681 tons per 12 consecutive month period at such time that the source has installed and operated their NO_x pollution control system reported on a quarterly basis.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Autumn Marker or extension 3-0242, or dial (317)233-0242.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

AMM

cc: File - Marion County
U.S. EPA, Region V
Marion County Health Department
Air Compliance Section Inspector - Dick Sekula
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner
Ron Davies - Ogden Martin Systems of Indianapolis
Rajesh Khanna - Ogden Energy
David Jordan - ERM

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT

**Indianapolis Resource Recovery Facility
Ogden Martin Systems of Indianapolis, Inc.
2320 South Harding Street
Indianapolis, Indiana 46221**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 097-10550-00123	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A	SOURCE SUMMARY	4
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]	
A.3	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONSTRUCTION CONDITIONS	5
B.1	Permit No Defense [IC 13]	
B.2	Definitions [326 IAC 2-7-1]	
B.3	Effective Date of the Permit [IC13-15-5-3]	
B.4	Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]	
B.5	Significant Source Modification [326 IAC 2-7-10.5(h)]	
C	GENERAL OPERATION CONDITIONS	6
C.1	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]	
C.2	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]	
C.3	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]	
C.4	Opacity [326 IAC 5-1]	
C.5	Operation of Equipment [326 IAC 2-7-6(6)]	
C.6	Stack Height [326 IAC 1-7]	
C.7	Performance Testing [326 IAC 3-6]	
C.8	Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	
C.9	Maintenance of Gaseous Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]	
C.10	Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]	
C.11	Compliance Monitoring Plan - Failure to Take Response Steps	
C.12	Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]	
C.13	Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]	
C.14	General Record Keeping Requirements [326 IAC 2-7-5(3)]	
C.15	General Reporting Requirements [326 IAC 2-7-5(3)(C)]	
D.1	FACILITY OPERATION CONDITIONS - Three (3) municipal waste combustor units	14
	Emission Limitations and Standards [326 IAC 2-7-5(1)]	
D.1.1	Effective Date of NSPS 40 CFR Part 60, Subpart Cb	
D.1.2	General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]	
D.1.3	Prevention of Significant Deterioration (PSD) [326 IAC 2-2]	
D.1.4	Emission Limits [326 IAC 11-7-3][40 CFR 60, Subpart Cb]	
D.1.5	Fugitive Ash limits [326 IAC 11-7-6] [40 CFR 60, Subpart Cb]	
D.1.6	Operation Practices [326 IAC 11-7-4] [40 CFR 60, Subpart Cb]	
D.1.7	Volatile Organic Compound Emissions	
D.1.8	Flue Gas Oxygen Concentration	
D.1.9	Natural Gas Capacity	
D.1.10	Preventive Maintenance Plan	
	Compliance Determination Requirements	
D.1.11	Compliance and Performance Testing [326 IAC 11-7-7] [40 CFR 60, Subpart Cb]	
D.1.12	Compliance Schedule [326 IAC 11-7-9]	
D.1.13	Mercury	
D.1.14	Testing Requirement [326 IAC 2-7-6(1),(6)]	
	Compliance Monitoring	
D.1.15	Monitoring of Operations [40 CFR 60, Subpart Cb]	
D.1.16	Mercury Containing Waste	
D.1.17	Mercury Detection	

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.18 Record Keeping Requirements

D.1.19 Reporting Requirements

Certification	36
Quarterly Report (Medical Waste)	37
Quarterly Report (Medical Waste)	38

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary solid waste combustion facility.

Responsible Official:	Gary Crane
Source Address:	2320 South Harding Street, Indianapolis, Indiana 46221
Mailing Address:	40 Lane Road, Fairfield, New Jersey 07007
Phone Number:	317-634-7367
SIC Code:	4953
County Location:	Marion
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program
	Major, under PSD and Emission Offset Rules;
	Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Three (3) mass burn waterwall municipal solid waste combustion units, identified as EU#1, EU#2, and EU#3, capable of burning solid waste 726 tons per day at 5200 Btu/lb, municipal solid waste only, which is equivalent to 192,440 pounds per hour of steam. In addition, a maximum of 16,180 tons of medical waste per 12 consecutive month period for all three (3) combustor units combined without a NO_x air pollution control system, and 21,681 tons of medical waste per 12 consecutive month period for all three (3) combustor units combined with a NO_x air pollution control system can be burned. The facility is equipped with medical waste handling equipment. Each combustor unit is equipped with two (2) 140 mmBtu per hour natural gas fired burners used for start up, shutdown, and flame stabilization.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of operation shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying the operation as proposed in the application. The modified operation covered in the Significant Source Modification approval may begin on the date the affidavit of operation is postmarked or hand delivered to IDEM if modified as proposed.
- (b) If the operational modification differs from that proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.
- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management

Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any newly required monitoring related to that equipment, prior to the acceptance of medical waste at the facility. If a previous or existing approval or applicable requirement mandates compliance monitoring, the source will continue or initiate such monitoring. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule for newly required monitoring provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to receiving medical waste at the facility, with full justification of the reasons for the inability to meet this requirement.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.9 Maintenance of Gaseous Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
 - (1) In the event of a sulfur dioxide outlet monitor failure at the stack, the Permittee shall maintain slurry feed at the rate at which it was being fed prior to the monitor malfunction. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within ten (10) hours of the time of the initial monitor failure.
 - (2) In the event of nitrogen oxide monitor failure, the Permittee shall maintain ammonia feed at the rate at which it was being fed prior to the monitor malfunction. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within ten (10) hours of the time of the initial monitor failure.

- (3) In the event of carbon monoxide monitor failure, the Permittee shall utilize oxygen monitoring data to maintain proper combustion. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within seven (7) days of the time of the initial monitor failure.
- (4) In the event of oxygen monitor failure, the Permittee shall utilize carbon dioxide monitoring data to estimate oxygen levels. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within ten (10) hours of the initial monitor failure.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (b) In the case of continuous opacity monitoring, whenever the continuous opacity monitor is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours or more, visible emission readings should be performed in accordance with 40 CFR 60, Appendix A, Method 9, beginning four (4) hours after the start of the malfunction or down time for a minimum of one (1) hour.
- (c) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
- (d) Method 9 opacity readings shall repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.
- (e) The opacity readings during this period shall be reported in the quarterly Compliance Monitoring Reports, unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector within four (4) working hours.
- (f) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this approval;

- (3) The Compliance Monitoring Requirements in Section D of this approval;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall

submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%), unless specifically stated in Section D of this permit, of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2)

years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this approval;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from a approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other

means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Three (3) mass burn waterwall municipal solid waste combustion units, identified as EU#1, EU#2, and EU#3, capable of burning solid waste 726 tons per day at 5200 Btu/lb, municipal solid waste only, which is equivalent to 192,440 pounds per hour of steam. In addition, a maximum of 16,180 tons of medical waste per 12 consecutive month period for all three (3) combustor units combined without a NO_x air pollution control system, and 21,681 tons of medical waste per 12 consecutive month period for all three (3) combustor units combined with a NO_x air pollution control system can be burned. The facility is equipped with medical waste handling equipment. Each combustor unit is equipped with two (2) 140 mmBtu per hour natural gas fired burners used for start up, shutdown, and flame stabilization.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Effective Date of NSPS 40 CFR Part 60, Subpart Cb

All conditions from the past permits, which are reflected in this permit, are applicable until 40 CFR 60, Subpart Cb becomes effective. All conditions related to 40 CFR 60, Subpart Cb will be effective after the initial performance test. The deadline of the initial performance test is December 19, 2000.

D.1.2 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Cb and (as referenced within Subpart Cb) specific provisions of Subpart Eb.

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following condition(s) shall apply:

- (a) The NO_x emissions from the combustion of medical waste shall not exceed 39 tons per year. In order to remain under thirty-nine (39) tons of NO_x, the medical waste throughput to all three (3) combustor units combined shall not exceed 16,180 tons per 12 consecutive month period.
- (b) The NO_x emissions from the combustion of medical waste shall not exceed thirty-nine (39) tons per year. The amount of medical waste that may be combusted at the source shall increase to 21,681 tons per 12 consecutive month period for all three (3) combustor units combined at such time that the source has installed and operated their NO_x air pollution control system; and the source has demonstrated compliance with the NO_x emission rate of 205 parts per million by volume (ppmv) corrected to 7% oxygen, dry basis, 24-hour daily arithmetic average using valid CEM data while combusting both municipal and medical waste simultaneously.

D.1.4 Emission Limits [326 IAC 11-7-3][40 CFR 60, Subpart Cb]

Pursuant to 326 IAC 11-7-3; 40 CFR 60.33b, Subpart Cb; and 40 CFR 60.34b, the concentration of pollutants contained in the gases discharged to the atmosphere from the municipal waste combustor facility shall not exceed the following limits:

- (a) Particulate - 23 milligrams per dry standard cubic meter (mg/dscm), corrected to twelve percent (12%) carbon dioxide.

- (b) Opacity - 10% based on a 6-minute average.
- (c) Cadmium - 0.040 milligrams per dry standard cubic meter (mg/dscm) corrected to seven percent (7%) oxygen.
- (d) Lead - 0.44 milligrams per dry standard cubic meter (mg/dscm) corrected to seven percent (7%) oxygen.
- (e) Mercury - 0.080 milligrams per dry standard cubic meter (mg/dscm); or 15% of the potential mercury emissions concentration corrected to seven percent (7%) oxygen whichever concentration is less stringent.
- (f) Sulfur dioxide - 29 parts per million by volume (ppmv); or 20% of the potential sulfur dioxide emission concentration corrected to seven percent (7%) oxygen, dry basis, calculated as a 24-hour daily geometric mean whichever concentration is less stringent.
- (g) Hydrogen chloride - 29 parts per million by volume (ppmv); or 5% of the potential hydrogen chloride emissions concentration corrected to seven percent (7%) oxygen, dry basis, whichever concentration is less stringent.
- (h) Organic emissions (expressed as total mass dioxins/furans) - 30 nanograms per dry standard cubic meter (ng/dscm) total mass corrected to seven percent (7%) oxygen.
- (i) Nitrogen oxides - 205 parts per million by volume (ppmv) corrected to seven percent (7%) oxygen, dry basis.
- (j) Carbon monoxide - 100 parts per million by volume (ppmv) measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to seven percent (7%) oxygen, dry basis, calculated as an arithmetic mean (based on a 4-hour block averaging time).

Compliance with the particulate limit in Condition D.1.4(a) will also satisfy the particulate limit requirement in 40 CFR 60, Subpart E.

Compliance with the particulate limit in Condition D.1.4(a) will also satisfy the particulate limit requirement in 40 CFR 60, Subpart Db.

	Emission limits per previous operating permit	Emission limits per 40 CFR 60.30b, Subpart Cb, and 326 IAC 11-7
Particulate Matter	0.01 grains per dry standard cubic foot (gr/dscf), corrected to twelve percent (12%) carbon dioxide	23 mg/dscm, corrected to twelve percent (12%) carbon dioxide
Opacity	10% based on an average of twenty-four (24) consecutive observations recorded at fifteen (15) second intervals	10% based on a 6-minute average
Cadmium	(No previous permit limit)	0.040 milligrams per dry standard cubic meter (mg/dscm) corrected to seven percent (7%) oxygen
Lead	0.001 grains per dry standard cubic foot (gr/dscf), corrected to twelve percent (12%) carbon dioxide averaged over a 3-month period	0.44 milligrams per dry standard cubic meter (mg/dscm) corrected to seven percent (7%) oxygen
Mercury	0.00028 grains per dry standard cubic foot (gr/dscf), corrected to twelve percent (12%) carbon dioxide averaged over a 24-hour rolling period	0.080 milligrams per dry standard cubic meter (mg/dscm); or 15% of the potential mercury emissions concentration corrected to seven percent (7%) oxygen whichever is less stringent
Sulfur Dioxide	(i) 30 parts per million by volume (ppmv), corrected to twelve percent (12%) carbon dioxide when the inlet sulfur dioxide concentration is at or below 150 ppmv corrected to 12% carbon dioxide (ii) Twenty (20) percent of the inlet sulfur dioxide concentration when the inlet sulfur dioxide concentration is above 150 ppmv corrected to 12% carbon dioxide (this equates to 80% reduction efficiency) Averaged over rolling 24-hour periods.	29 parts per million by volume (ppmv); or 20% of the potential sulfur dioxide emission concentration corrected to seven percent (7%) oxygen, dry basis, calculated as a 24-hour daily geometric mean whichever concentration is less stringent
Hydrogen Chloride	(i) 30 parts per million by volume (ppmv), corrected to twelve percent (12%) carbon dioxide when inlet hydrogen chloride is at or below 150 ppmv corrected to 12% carbon dioxide (ii) Twenty (20) percent of the inlet hydrogen chloride concentration when the inlet hydrogen chloride concentration is above 150 ppmv corrected to 12% carbon dioxide (this equates to 80% reduction efficiency) Averaged over rolling 8-hour periods.	29 parts per million by volume (ppmv); or 5% of the potential hydrogen chloride emissions concentration corrected to seven percent (7%) oxygen, dry basis, whichever concentration is less stringent
Dioxins/Furans	(No previous permit limit)	30 nanograms per dry standard cubic meter (ng/dscm) total mass corrected to seven percent (7%) oxygen
Nitrogen Oxides	272 parts per million by volume (ppmv), corrected to twelve percent (12%) carbon dioxide	205 parts per million by volume (ppmv) corrected to seven percent (7%) oxygen, dry basis, 24-hour daily arithmetic average
Carbon Monoxide	135 parts per million by volume (ppmv), corrected to twelve percent (12%) carbon dioxide averaged over rolling 8-hour periods	100 parts per million by volume (ppmv) measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to seven percent (7%) oxygen, dry basis, calculated as an arithmetic mean (based on a 4-hour block averaging time)

D.1.5 Fugitive Ash limits [326 IAC 11-7-6] [40 CFR 60, Subpart Cb]

Pursuant to 326 IAC 11-7-6; 40 CFR 60.36b, Subpart Cb; and 40 CFR 60.55b, Subpart Eb as amended by 60FR 45124 (August 25, 1997)

- (a) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8 of subpart A, no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs (b) and (c) below.
- (b) The emission limit specified in paragraph (a) above does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) above does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.
- (c) The provisions specified in paragraph (a) above do not apply during maintenance and repair of ash conveying systems.

D.1.6 Operation Practices [326 IAC 11-7-4] [40 CFR 60, Subpart Cb]

Pursuant to 326 IAC 11-7-4 and 40 CFR 60.53b(b) and (c), Subpart Eb, as amended by 60 FR 45124 (August 25, 1997).

- (a) **Unit Capacity Limits**
No owner or operator of an affected facility shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in 40 CFR 60.51b, except as specified in paragraphs (b)(1) and (b)(2) below. The averaging time is specified under 40 CFR 60.58b(i).
 - (1) During the annual dioxin/furan performance test and the 2 weeks preceding the annual dioxin/furan performance test, no municipal waste combustor unit load limit is applicable.
 - (2) The municipal waste combustor unit load limit may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.
- (b) **PM Controls**
No owner or operator of an affected facility shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding seventeen degrees Celsius (17°C) above the maximum demonstrated particulate matter control device temperature as defined in 40 CFR 60.51b, except as specified in 40 CFR 60.53b(c)(1) and (c)(2). The averaging time is specified under 40 CFR 60.58b(i). The requirements specified in this paragraph apply to each particulate matter control device utilized at the affected facility.
 - (1) During the annual dioxin/furan performance test and the 2 weeks preceding the annual dioxin/furan performance test, no particulate matter control device temperature limitations are applicable.

- (2) The particulate matter control device temperature limits may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

D.1.7 Volatile Organic Compound Emissions

Pursuant to Operation Permit issued May 12, 1989, the total non-methane hydrocarbon (VOC) mass emission rate shall not exceed 3.30 pounds per hour and an annual emission rate of 14.45 tons while combusting only municipal waste.

- (a) The total non-methane hydrocarbon (VOC) mass emission rate shall not exceed 3.37 pounds per hour and an annual emission rate of 14.76 tons from the combustion of 16,180 tons of medical waste in a 12 consecutive month period without NO_x air pollution control equipment combined with the combustion of municipal waste.
- (b) The total non-methane hydrocarbon (VOC) mass emission rate shall not exceed 3.39 pounds per hour and an annual emission rate of 14.84 tons from the combustion of 21,681 tons of medical waste in a 12 consecutive month period with NO_x air pollution control equipment combined with the combustion of municipal waste.

D.1.8 Flue Gas Oxygen Concentration

Pursuant to Operation Permit issued May 12, 1989, the flue gas oxygen concentration shall not be less than three percent (3%) at the economizer outlet.

D.1.9 Natural Gas Capacity

The facility is limited to an annual capacity factor of ten percent (10%) or less for natural gas use.

Compliance with this limit will render the requirements of 40 CFR 60.44b, Subpart Db, not applicable.

D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.1.11 Compliance and Performance Testing [326 IAC 11-7-7] [40 CFR 60, Subpart Cb]

Pursuant to 326 IAC 11-7-7, 326 IAC 3-5, 326 IAC 3-6, 40 CFR 60.38b, Subpart Cb, and 40 CFR 60.58b, Subpart Eb as amended by 60FR 45124 (August 25, 1997) unless otherwise specified.

- (a) **Startup/Shutdown and Malfunction**
The provisions for startup, shutdown, and malfunction is provided in paragraphs (a)(1) below.
 - (1) The standards under this subpart apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.
 - (i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warmup period when the affected facility is combusting fossil fuel or

other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

- (ii) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.
- (iii) The shutdown period, as defined by Ogden Martin Systems of Indianapolis, Inc., for the boiler begins when the continuous burning of solid waste is ceased and the shutdown period at the Indianapolis Resource Recovery Facility (IRRF) commences when the subject unit's feedchute damper is shut (this is the time that continuous feeding is ceased). Shutdown of a unit is complete when solid waste is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure that the fires are out and oxygen is seventeen percent (17%) or greater.
- (iv) Malfunction, as defined under 40 CFR 60.2, is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(b) **CEMS (oxygen or carbon dioxide content of flue gas)**

The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and shall comply with the test procedures and test methods specified in paragraphs (b)(1) through (b)(7) below.

- (1) The span value of the oxygen (or carbon dioxide) monitor shall be 25 percent oxygen (or carbon dioxide).
- (2) The monitor shall be installed, evaluated, and operated in accordance with 40 CFR 60.13 of subpart A.
- (3) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under 40 CFR 60.8 of subpart A.
- (4) The monitor shall conform to Performance Specification 3 in appendix B of 40 CFR Part 60 except for section 2.3 (relative accuracy requirement).
- (5) The quality assurance procedures of appendix F of 40 CFR Part 60 except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.
- (6) If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the initial performance test according to the procedures and methods specified in

paragraphs (b)(6)(i) through (b)(6)(iv) below. This relationship may be reestablished during performance compliance tests.

- (i) The fuel factor equation in Method 3B shall be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3, 3A, or 3B, as applicable, shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.
 - (ii) Samples shall be taken for at least 30 minutes in each hour.
 - (iii) Each sample shall represent a 1-hour average.
 - (iv) A minimum of three runs shall be performed.
- (7) As required by 40CFR 60.59b(f)(5), the relationship between carbon dioxide and oxygen concentrations that is established in accordance with paragraph (b)(6) above shall be submitted to the EPA as part of the initial performance test report and, if applicable, as part of the annual test report if the relationship is reestablished during the annual performance test.

(c) **Particulate Matter and Opacity**

The procedures and test methods specified in paragraphs (c)(1) through (c)(10) below shall be used to determine compliance with the emission limits for particulate matter and opacity under 40 CFR 60.33b(a)(1) and (a)(2).

- (1) The EPA Reference Method 1 shall be used to select sampling site and number of traverse points.
- (2) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for gas analysis.
- (3) The EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160+/-14 degree Celsius. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.
- (4) An owner or operator may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of this section.
- (5) As specified under 40 CFR 60.8 of subpart A, all performance tests shall consist of three test runs. The average of the particulate matter emission concentrations from the three test runs is used to determine compliance.
- (6) In accordance with paragraphs (c)(7) and (c)(10) of this section, EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(e) of subpart A.

- (7) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions and opacity as required under 40 CFR 60.8 of subpart A.
 - (8) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified in paragraphs (c)(8)(i) through (c)(8)(iii) below.
 - (i) The output of the continuous opacity monitoring system shall be recorded on a 6-minute average basis.
 - (ii) The continuous opacity monitoring system shall be installed, evaluated, and operated in accordance with 40 CFR 60.13 of subpart A.
 - (iii) The continuous opacity monitoring system shall conform to Performance Specification 1 in appendix B of this part.
 - (9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under 40 CFR 60.8 of subpart A of this part for an affected facility, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test).
 - (10) Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 of subpart A for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (c)(6) of this section.
- (d) **Cadmium, Lead, and Mercury**
The procedures and test methods specified in paragraphs (d)(1) and (d)(2) below shall be used to determine compliance with the emission limits for cadmium, lead, and mercury under 40 CFR 60.33b(a)(2) and (a)(3).
- (1) The procedures and test methods specified in paragraphs (d)(1)(i) through (d)(1)(vii) below shall be used to determine compliance with the emission limits for cadmium and lead under 40 CFR 60.33b(a)(2).
 - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
 - (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
 - (iii) The EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits.
 - (iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under paragraph (d)(1)(iii) of this section.
 - (v) An owner or operator of an affected facility may request that compliance with the cadmium or lead emission limit be determined using carbon

dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of this section.

- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the cadmium or lead emission concentrations from three test runs or more shall be used to determine compliance.
 - (vii) Following the date of the initial performance test or the date on which the initial performance test is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission limits for cadmium and lead on an annual basis (no more than 12 calendar months following the previous performance test).
- (2) The procedures and test methods specified in paragraphs (d)(2)(i) through (d)(2)(x) below shall be used to determine compliance with the mercury emission limit under 40 CFR 60.33b(a)(3).
- (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
 - (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
 - (iii) The EPA Reference Method 29 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters.
 - (iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 test run for mercury required under paragraph (d)(2)(iii) of this section.
 - (v) The percent reduction in the potential mercury emissions (%PHg) is computed using equation 1:

$$(\%P_{Hg}) = ((E_i - E_o) / E_i) \times 100$$

where:

$\%P_{Hg}$ = percent reduction of the potential mercury emissions achieved.

E_i = potential mercury emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

E_o = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7 percent oxygen (dry basis).

- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the mercury emission concentrations or percent reductions from three test runs or more is used to determine compliance.

- (vii) An owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of 40 CFR 60.58b.
- (viii) The owner or operator of an affected facility shall conduct an initial performance test for mercury emissions as required under 40 CFR 60.8 of subpart A.
- (ix) Following the date that the initial performance test for mercury is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on an annual basis (no more than 12 calendar months from the previous performance test).
- (x) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in paragraph (l) of 40 CFR 60.58b for measuring and calculating carbon usage.

(e) **Sulfur Dioxide**

The procedures and test methods specified in paragraphs (e)(1) through (e)(13) of this section shall be used for determining compliance with the sulfur dioxide emission limit under 40 CFR 60.33b(b)(1).

- (1) The EPA Reference Method 19, section 4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.
- (2) The EPA Reference Method 19, section 5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.
- (3) An owner or operator of an affected facility may request that compliance with the sulfur dioxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of this section.
- (4) The owner or operator of an affected facility shall conduct an initial performance test for sulfur dioxide emissions as required under 40 CFR 60.8 of subpart A. Compliance with the sulfur dioxide emission limit (concentration or percent reduction) shall be determined by using the continuous emission monitoring system specified in paragraph (e)(5) below to measure sulfur dioxide and calculating a 24-hour daily geometric average emission concentration or a 24-hour daily geometric average percent reduction using EPA Reference Method 19, sections 4.3 and 5.4, as applicable.
- (5) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
- (6) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under 40 CFR 60.8 of subpart A of this part,

compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction.

- (7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (e)(7)(i) and (e)(7)(ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
 - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) Each sulfur dioxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (8) The 1-hour arithmetic averages required under paragraph (e)(6) of this section shall be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily geometric average emission concentrations and daily geometric average emission percent reductions. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2) of subpart A of this part.
- (9) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements of paragraph (e)(7) of this section are not met.
- (10) The procedures under 40 CFR 60.13 of subpart A of this part shall be followed for installation, evaluation, and operation of the continuous emission monitoring system.
- (11) The continuous emission monitoring system shall be operated according to Performance Specification 2 in appendix B of 40 CFR Part 60.
 - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in appendix B of 40 CFR Part 60, sulfur dioxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (e)(11)(i)(A) and (e)(11)(i)(B) below.
 - (A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C shall be used.
 - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A or 3B, as applicable, shall be used.
 - (ii) The span value of the continuous emissions monitoring system at the inlet to the sulfur dioxide control device shall be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the

municipal waste combustor unit. The span value of the continuous emission monitoring system at the outlet of the sulfur dioxide control device shall be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit.

- (12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in appendix F of 40 CFR 60.
- (13) When sulfur dioxide emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste for 90 percent of the days per calendar quarter that the affected facility is operated and combusting municipal solid waste.

(f) **Hydrogen Chloride**

The procedures and test methods specified in paragraphs (f)(1) through (f)(7) of this section shall be used for determining compliance with the hydrogen chloride emission limit under 40 CFR 60.33b(b)(2).

- (1) The EPA Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time for Method 26 shall be 1 hour.
- (2) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 26 test run for hydrogen chloride required by paragraph (f)(1) of this section.
- (3) The percent reduction in potential hydrogen chloride emissions (% P_{HCl}) is computed using equation 2:

$$(\%P_{HCl}) = ((E_i - E_o) / E_i) \times 100$$

where:

%P_{HCl} = percent reduction of the potential hydrogen chloride emissions achieved.

E_i = potential hydrogen chloride emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

E_o = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

- (4) An owner or operator of an affected facility may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of 40 CFR 60.58b.
- (5) As specified under 40 CFR 60.8 of subpart A, all performance tests shall consist of three test runs. The average of the hydrogen chloride emission concentrations or percent reductions from the three test runs is used to determine compliance.

- (6) The owner or operator of an affected facility shall conduct an initial performance test for hydrogen chloride as required under 40 CFR 60.8 of subpart A.
- (7) Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).

(g) **Dioxin/Furan**

The procedures and test methods specified in paragraphs (g)(1) through (g)(9) of this section shall be used to determine compliance with the limits for dioxin/furan emissions under 40 CFR 60.33b(c).

- (1) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (2) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
- (3) The EPA Reference Method 23 shall be used for determining the dioxin/furan emission concentration.
 - (i) The minimum sample time shall be 4 hours per test run.
 - (ii) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 23 test run for dioxins/furans.
- (4) The owner or operator of an affected facility shall conduct an initial performance test for dioxin/furan emissions in accordance with paragraph (g)(3) of this section, as required under 40 CFR 60.8 of subpart A.
- (5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (g)(3) above, according to one of the schedules specified in paragraphs (g)(5)(i) through (g)(5)(ii) below.
 - (i) For affected facilities, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.)
 - (ii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 15 nanograms per dry standard cubic meter total mass, corrected to 7 percent oxygen, for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, as applicable). If each annual

performance test continues to indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter corrected to seven percent (7%) oxygen, the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter corrected to seven percent (7%) oxygen, performance tests thereafter shall be conducted annually on all affected facilities at the plant until all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter corrected to seven percent (7%) oxygen.

- (6) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (g)(5)(ii) of this section shall follow the procedures specified in 40 CFR 60.59b(g)(4) for reporting the selection of this schedule.
- (7) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan emission limits specified in 40 CFR 60.33b(c) or the dioxin/furan emission level specified in paragraph (g)(5)(ii) above shall follow the procedures specified in paragraph (k) of this section for measuring and calculating the carbon usage rate.
- (8) An owner or operator of an affected facility may request that compliance with the dioxin/furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of 40 CFR 60.58b.
- (9) As specified under 40 CFR 60.8 of subpart A of this part, all performance tests shall consist of three test runs. The average of the dioxin/furan emission concentrations from the three test runs is used to determine compliance.
- (h) **Nitrogen Oxides**
The procedures and test methods specified in paragraphs (h)(1) through (h)(12) of this section shall be used to determine compliance with the nitrogen oxides emission limit for affected facilities under 40 CFR 60.33b(d).
 - (1) The EPA Reference Method 19, section 4.1, shall be used for determining the daily arithmetic average nitrogen oxides emission concentration.
 - (2) An owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of 40 CFR 60.58b.
 - (3) The owner or operator of an affected facility subject to the nitrogen oxides limit under 40 CFR 60.33b(d) shall conduct an initial performance test for nitrogen oxides as required under 40 CFR 60.8 of subpart A of this part. Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (h)(4) of this section for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 4.1.

- (4) The owner or operator of an affected subject to the nitrogen oxides emission limit under 40 CFR 60.33b(d) shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxides discharged to the atmosphere, and record the output of the system.
- (5) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under 40 CFR 60.8 of subpart A of this part, compliance with the emission limit for nitrogen oxides required under 40 CFR 60.33b(d) shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.
- (6) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (h)(6)(i) and (h)(6)(ii) below for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
 - (i) At least 2 data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) Each nitrogen oxides 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (7) The 1-hour arithmetic averages required by paragraph (h)(5) of 40 CFR 60.58b shall be expressed in parts per million by volume (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2) of subpart A of 40 CFR Part 60.
- (8) All valid continuous emission monitoring system data must be used in calculating emission averages even if the minimum continuous emission monitoring system data requirements of paragraph (h)(6) of 40 CFR 60.58b are not met.
- (9) The procedures under 40 CFR 60.13 of subpart A of this part shall be followed for installation, evaluation, and operation of the continuous emission monitoring system.
- (10) The owner or operator of an affected facility shall operate the continuous emission monitoring system according to Performance Specification 2 in appendix B of this part and shall follow the procedures and methods specified in paragraphs (h)(10)(i) and (h)(10)(ii) of this section.
 - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 of appendix B of this part, nitrogen oxides and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (h)(10)(i)(A) and (h)(10)(i)(B) of this section.
 - (A) For nitrogen oxides, EPA Reference Method 7, 7A, 7C, 7D, or 7E shall be used.

- (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A or 3B, as applicable, shall be used.
 - (ii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of the municipal waste combustor unit.
- (11) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in appendix F of 40 CFR 60.
- (12) When nitrogen oxides continuous emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day for 90 percent of the days per calendar quarter the unit is operated and combusting municipal solid waste.
- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
The procedures specified in paragraphs (i)(1) through (i)(11) below shall be used for determining compliance with the operating requirements under 40 CFR 60.34b.
 - (1) Compliance with the carbon monoxide emission limits in 40 CFR 60.34b(a) shall be determined using a 4-hour block arithmetic average.
 - (2) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs (i)(2)(i) through (i)(2)(iii) of this section.
 - (i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in appendix B of 40 CFR Part 60.
 - (ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in appendix B of 40 CFR Part 60, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (i)(2)(ii)(A) and (i)(2)(ii)(B) below.
 - (A) For carbon monoxide, EPA Reference Method 10, 10A, or 10B shall be used.
 - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A or 3B, as applicable, shall be used.
 - (iii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.
 - (3) The 4-hour block average specified in paragraphs (i)(1) above shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous

emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.

- (4) An owner or operator of an affected facility may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of 40 CFR 60.58b.
- (5) The procedures specified in paragraphs (i)(5)(i) through (i)(5)(v) below shall be used to determine compliance with load level requirements under 40 CFR 60.34b(b).
 - (i) The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages.
 - (ii) The method included in the "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1--1964 (R1991)" section 4 (incorporated by reference, see 40 CFR 60.17 of subpart A) shall be used for calculating the steam (or feedwater) flow required under paragraph (i)(5)(i) of this section. The recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971)," chapter 4 (incorporated by reference--see 40 CFR 60.17 of subpart A) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified in (i)(5)(iii) of this section.
 - (iii) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed.
 - (iv) All signal conversion elements associated with steam (or feedwater flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.
- (6) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR 60.34b(b), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.
- (7) The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.33b(c) is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.

- (8) For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.33b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.
- (9) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i)(9)(i) and (i)(9)(ii) below for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
 - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) At a minimum, each carbon monoxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (10) All valid continuous emission monitoring system data must be used in calculating the parameters specified under paragraph (i) of 40 CFR 60.58b even if the minimum data requirements of paragraph (i)(9) above are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.
- (11) Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in appendix F of 40 CFR 60.
- (j) **Fugitive Ash Emissions**
The procedures specified in paragraphs (j)(1) through (j)(4) below shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b.
 - (1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
 - (2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.
 - (3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8 of subpart A of 40 CFR Part 60.

- (4) Following the date that the initial performance test for fugitive ash emissions is completed under 40 CFR 60.8 of subpart A of 40 CFR Part 60 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

(k) **Carbon Injection**

The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit under 40 CFR 60.33b(a), or the dioxin/furan emission limits under 40 CFR 60.33b(c), or the dioxin/furan emission level specified in 40 CFR 60.38b(b) shall follow the procedures specified in paragraphs (k)(1) through (k)(3) below.

- (1) During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified in paragraphs (k)(1)(i) and (k)(1)(ii) below.
 - (i) An average carbon mass feed rate in pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions.
 - (ii) An average carbon mass feed rate in pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions.
- (2) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) must equal or exceed the level(s) documented during the performance tests specified under paragraphs (k)(1)(i) and (k)(1)(ii) above.
- (3) The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs (k)(3)(i) and (k)(3)(ii) below.
 - (i) The weight of carbon delivered to the plant.
 - (ii) Estimate the average carbon mass feed rate in pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (k)(1) above, and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.

Ogden Martin Systems of Indianapolis, Inc., intends to utilize a gravametric feeder to estimate carbon mass feed rate for the carbon injection system to comply with the mercury emission limit under 40 CFR 60.33b(a), or the dioxin/furan emission limits under 40 CFR 60.33b(c), or the dioxin/furan emission level specified in 40 CFR 60.38b(b).

D.1.12 Compliance Schedule [326 IAC 11-7-9]

- (a) Pursuant to 326 IAC 11-7-9, Designated facilities shall be in compliance with this rule (326 IAC 11-7), except section 5 of this rule, according to one (1) of the following compliance schedules:
 - (1) By February 17, 2000, but not later than December 19, 2000.
 - (2) By December 19, 2000, provided the following:
 - (A) Installation of air pollution control equipment is necessary to achieve compliance.
 - (B) The designated facility complies with the measurable and enforceable incremental steps of progress listed as follows:
 - (i) Submit a final control plan to do the department no later than thirty (30) days after the effective date of this rule. This date does not affect the date that a final control plan is required to be submitted to the U.S. EPA. (The sources final control plan was submitted to the IDEM-OAM on January 4, 1999.)
 - (ii) Award contracts for emission control systems or for process modifications, or issuance of orders for the purchase of component parts to accomplish emission control or process modifications by May 18, 1999. (A copy of the sources contract was submitted to IDEM-OAM on May 18, 1999.)
 - (iii) Initiate on-site construction or installation of emission control equipment or process change by November 16, 1999.
 - (iv) Complete on-site construction or installation of emission control equipment or process change by November 16, 2000.
 - (C) Designated facilities that are not in compliance February 17, 2000, must submit performance test results for dioxin/furan emissions that have been conducted during or after 1990.
 - (D) The performance test shall be conducted according to the procedures in 40 CFR 60.38b, Subpart Cb, as amended by 60FR 45116 (August 25, 1997).
- (b) All designated facilities shall be in compliance with the training and certification requirements by September 1, 1999. The initial training requirements specified in 40 CFR 60.54b(f)(1), subpart Eb, as amended by 60 FR 45124 (August 25, 1997), shall be completed by whichever date comes later:
 - (A) September 1, 1999; or
 - (B) the date prior to the day when the person assumes responsibilities affecting municipal waste combustor unit operation.
- (c) Designated Facilities not in compliance by December 19, 2000, shall cease operation.

- (d) Notwithstanding the requirements of this section, the designated facility shall comply with the compliance schedule in the federal plan until the state plan is approved by the U.S. EPA.

D.1.13 Mercury

The carbon injection system for mercury control shall be in operation and control emissions from the municipal waste combustors at all times when the facility is in operation and medical waste is being burned.

D.1.14 Testing Requirement [326 IAC 2-7-6(1),(6)]

- (a) Within 120 days after commencing acceptance of medical waste at the facility, Ogden Martin Systems of Indianapolis, Inc., shall perform Hg, dioxin/furan, HCl, and NOx testing on a minimum of one of the combustor units dedicated to the combustion of medical waste using methods as approved by the Commissioner, in order to demonstrate compliance with corresponding limits in Condition D.1.4. Compliance with NOx emission limitation may be demonstrated using valid CEM data obtained while burning a combination of municipal and medical waste. The allowable medical waste hourly throughput shall be determined at a level 5% above the level achieved during the most recent compliance stack test.
- (b) Ogden Martin Systems of Indianapolis, Inc., will continue to perform stack tests as required by 40 CFR 60, Subpart Cb, and 326 IAC 11-7. During these tests Ogden Martin Systems of Indianapolis, Inc., shall on a minimum of one unit test for Hg, dioxin/furan, HCl, and NOx, while combusting both municipal and medical waste to demonstrate compliance with corresponding emission limits. The allowable medical waste hourly throughput shall be determined at a level 5% above the level achieved during the most recent compliance stack test.
- (c) In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facilities are in compliance.

Compliance Monitoring Requirements

D.1.15 Monitoring of Operations

Pursuant to 40 CFR 60.53, Subpart E, the owner or operator of any incinerator subject to the provisions of 40 CFR Subpart E shall record the daily charging rates and hours of operation.

D.1.16 Mercury Containing Waste

Prior to accepting medical waste from a medical waste generator, Ogden Martin Systems of Indianapolis, Inc., shall enter into waste disposal agreements with all medical waste generators stating that mercury containing waste is prohibited and will not be accepted at the Indianapolis Resource Recovery Facility. Every waste disposal agreement shall include a list of common mercury-containing items. The list of mercury-containing items shall include those listed below at a minimum.

Common mercury-containing items include, but are not limited to:

- Thermometers (silver-colored liquid inside)
- Thermostats (nonelectronic)
- Fluorescent and other mercury vapor lighting (high intensity discharge - HID, metal halide, high pressure sodium and neon bulbs)
- Gauges (barometers, manometers, blood pressure and vacuum gauges with silver-colored liquid)
- Batteries (mercuric oxide and some alkaline batteries)

- Paint (latex manufactures before 1990, and some oil base-paints; check the label)
- Thimerosal or merbromin (in some antibacterial products)
- Elemental mercury (from labs)
- Esophageal Dilators
- Laboratory fixatives

D.1.17 Mercury Detection

Ogden Martin Systems of Indianapolis, Inc., shall utilize a jerome meter (or its equivalent) on loads from all medical waste generators for the first sixty (60) loads to assist in the detection of mercury-containing waste in the medical waste stream entering their facility. After the jerome meter (or its equivalent) has been utilized on the first sixty (60) loads from each medical waste generator, the jerome meter (or its equivalent) shall be utilized on a random basis for that particular medical waste generator. In the event that mercury-containing waste is detected in a load at the facility, OMSI shall reject and return the load to the medical waste generator. OMSI shall work with the medical waste generator in question to identify and isolate the source of mercury in the waste stream.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.18 Record Keeping Requirements

- (a) In order to document compliance with Condition D.1.3(a) and D.1.3(b), the owner or operator shall maintain records of the total amount of medical waste combusted at the facility in tons per month.
- (b) In order to document compliance with Condition D.1.9, the owner or operator shall record and maintain the amount of natural gas combusted during each day and calculate the annual capacity factor for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
- (c) In order to document compliance with Condition D.1.16, the owner or operator shall maintain records of current contracts signed by all medical waste generators.
- (d) In order to document compliance with Condition D.1.17, the owner or operator shall maintain records of the following:
 - (1) Name of the jerome meter (or its equivalent) operator;
 - (2) Date medical waste load tested at the OMSI facility;
 - (3) Indication of whether or not mercury was detected in the load; and
 - (4) Action taken if mercury was detected in the medical waste load.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.19 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3(a) and D.1.3(b) shall be submitted to the address in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.

OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Ogden Martin Systems of Indianapolis, Inc.
Source Address: 2320 South Harding Street, Indianapolis, Indiana 46221
Mailing Address: 40 Lane Road, Fairfield, New Jersey 07007
Source Modification No.: 097-10500-00123

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Ogden Martin Systems of Indianapolis, Inc.
Source Address: 2320 South Harding Street, Indianapolis, IN 46221
Mailing Address: 4 Lane Road, Fairfield, NJ 07007
Source Modification No.: 097-10550-00123
Facility: combustor units - EU1, EU2, and EU3
Parameter: medical waste throughput (no NO_x air pollution control equipment)
Limit: 16,180 tons per 12 consecutive month period, NO_x emissions from
burning medical waste less than 40 tons per year

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Ogden Martin Systems of Indianapolis, Inc.
Source Address: 2320 South Harding Street, Indianapolis, IN 46221
Mailing Address: 4 Lane Road, Fairfield, NJ 07007
Source Modification No.: 097-10550-00123
Facility: combustor units - EU1, EU2, and EU3
Parameter: medical waste throughput (with NO_x air pollution control equipment)
Limit: 21,681 tons per 12 consecutive month period, NO_x emissions from
burning medical waste less than 40 tons per year

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Ogden Martin Systems of Indianapolis, Inc.
2320 South Harding Street
Indianapolis, Indiana 46221

Affidavit of Operation

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Ogden Martin Systems of Indianapolis, Inc., 2320 South Harding Street, Indianapolis, Indiana, 46221, has constructed the medical waste handling equipment which will allow the facility to handle and combust medical waste at the facility in conformity with the requirements and intent of the Significant Source Modification application received by the Office of Air Management on January 19, 1999, and as permitted pursuant to **Significant Source Modification No. CP-097-10550, Plant ID No. 097-00123** issued on _____.
5. Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)
6. I hereby certify that Ogden Martin Systems of Indianapolis, Inc., is subject to the Title V program and has submitted a Title V operating permit application.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 19 _____.

My Commission expires: _____

Signature

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Significant Source Modification

Source Name:	Ogden Martin Systems of Indianapolis, Inc.
Source Location:	2320 South Harding Street, Indianapolis, Indiana 46221
County:	Marion County
SIC Code:	4953
Source Modification No.:	T097-10550-00123
Operation Permit No.:	T097-5985-00123
Permit Reviewer:	Autumn M. Marker

On June 22, 1999, the Office of Air Management (OAM) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Ogden Martin Systems of Indianapolis, Inc., had applied for a Significant Source Modification to accept medical waste at their current combustor facility. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 26, 1999, the OAM received comments from Ogden Martin Systems of Indianapolis, Inc., regarding the draft Significant Source Modification. The summary of the comments is as follows. (Deleted language appears as ~~strikeouts~~ and the new language is **bolded**.)

Comment 1:

Condition A.2 - Modify as indicated below:

“... capable of burning solid waste (726 tons per day at 5200 Btu/lb, municipal solid waste, **which is equivalent to 192,440 pounds per hour of steam**) with a maximum steam production limit of ~~192,440 pounds per hour over average discrete four (4) hour period~~ **110% of the highest 4-hour arithmetic average load achieved during the most recent dioxin/furan stack test**. In addition, a maximum of 16,180 tons of medical waste per ... and 21,681 tons of medical waste per ...”

Response 1:

The OAM believes that the change to add “110% of the highest...stack test” is not necessary to describe OMSI facility’s maximum capacity. As indicated, descriptions are not federally enforceable. The other changes to the description have been made.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Three (3) mass burn waterwall municipal solid waste combustion units, identified as EU#1, EU#2, and EU#3, capable of burning solid waste (726 tons per day at 5200 Btu/lb, municipal solid waste only, **which is equivalent to 192,440 pounds per hour of steam**) ~~with a maximum steam production limit of 192,440 pounds per hour over average discrete four (4) hour period.~~ In addition, a maximum of 16,180 tons **of medical waste** per 12 consecutive month period for all three (3) combustor units combined without a NO_x **air pollution** control system, and 21,681 tons **of medical waste** per 12 consecutive month period for all three (3) combustor units combined with a NO_x **air pollution** control system can be burned. The facility is equipped with medical waste handling equipment. Each combustor unit is equipped with two (2) ~~486~~ **140** mmBtu per hour natural gas fired burners used for start up, shutdown, and flame stabilization.

Comment 2:

Condition C.5 - This condition requires that air pollution control equipment be operated at all times that the emission unit(s) vented to the control device is in operation. OMSI assumes that, in relationship to the carbon and lime storage silos, that the dust collectors for these units need only be in operation when transferring material to the storage silos.

Response 2:

Condition C.5 (Operation of Equipment) applies to air pollution control equipment listed in the approval. The carbon and lime storage silos mentioned in the comment made are not listed in this Significant Source Modification. This comment will be, however, incorporated into the Title V draft. There is no change due to this comment.

Comment 3:

Conditions C.9 and C.10 - These conditions require the use of surrogate measures in the event of a malfunction in CEM or COM equipment. OMSI requests that these conditions be deleted until such time as IDEM has reached agreement with Indiana electric utility companies regarding acceptable wording for these conditions.

Response 3:

IDEM, OAM, does not believe that these conditions should be deleted. The OAM has agreed to the following changes in an effort to make these conditions more source specific.

C.9 Maintenance of Gaseous Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (1) **In the event of a sulfur dioxide outlet monitor failure at the stack, the Permittee shall maintain slurry feed at the rate at which it was being fed prior to the monitor malfunction. If the Permittee is unable to repair the**

monitoring equipment, a backup analyzer shall be installed within ten (10) hours of the time of the initial monitor failure.

- (2) In the event of nitrogen oxide monitor failure, the Permittee shall maintain ammonia feed at the rate at which it was being fed prior to the monitor malfunction. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within ten (10) hours of the time of the initial monitor failure.**
- (3) In the event of carbon monoxide monitor failure, the Permittee shall utilize oxygen monitoring data to maintain proper combustion. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within seven (7) days of the time of the initial monitor failure.**
- (4) In the event of oxygen monitor failure, the Permittee shall utilize carbon dioxide monitoring data to estimate oxygen levels. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within ten (10) hours of the initial monitor failure.**

- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (b) In the case of continuous opacity monitoring, whenever the continuous opacity monitor is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours or more, visible emission readings should be performed in accordance with 40 CFR 60, Appendix A, Method 9, beginning four (4) hours after the start of the malfunction or down time for a minimum of one (1) hour.
- (c) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
- (d) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.
- (e) The opacity readings during this period shall be reported in the quarterly Compliance Monitoring Reports, unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector within four (4) working hours.
- (f) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

Comment 4:

Condition C.11 - This condition requires that OMSI implement a compliance monitoring plan. In correspondence from USEPA relative to other municipal waste combustor facilities, USEPA determined that so long as it complied with monitoring provisions of Subpart Cb, there were no additional monitoring

provisions that applied to this MWC facility. Does this condition implement monitoring requirements beyond those contained in Subpart Cb?

Response 4:

Condition C.11, Compliance Monitoring Plan - Failure to Take Response Steps, does not require any additional monitoring beyond that is not already required by the source in applicable regulations. The source is required, however, to comply with the condition as it is outlined which includes preparing a Compliance Response Plan.

Comment 5:

Condition C.13(e) - This condition provides that IDEM may excuse an operator's failure to make required monitoring observations, so long as the failure does not exceed 5% of the operating time in any quarter. It is not clear how (or if) this condition relates to monitoring data that is collected by a CEM or COM. New Source Performance Standards generally require that CEM/COM data be provided for at least 75% of the time the equipment is in operation. These requirements are outlined in greater detail later in the permit. OMSI requests that the permit be clarified to note that Condition C.13(e) applies only to data collected manually rather than continuously.

Response 5:

The OAM has decided to add the following language to clarify Condition C.13(e).

C.13 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%), **unless specifically stated in Section D of this permit**, of the operating time in any quarter.

Comment 6:

Condition C.14 - OMSI wishes to clarify that the records required under this condition are the records for CEM data only.

Response 6:

Condition C.14, General Record Keeping Requirements, applies to any records that the source would be required to keep under the permit. The records for the CEM data are not the only records that would apply to this condition. Any records (for example, amount of medical waste combusted) that the source is required to keep would need to follow the parameters outlined in Condition C.14. The following language has been added in order to clarify the condition.

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information **required by this permit** shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

Comment 7:

Section D.1 - The description should be modified consistent with comments made for Condition A.2 above.

Response 7:

The description in Section D.1 has been changed to reflect the changes in Condition A.2.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Three (3) mass burn waterwall municipal solid waste combustion units, identified as EU#1, EU#2, and EU#3, capable of burning solid waste (726 tons per day at 5200 Btu/lb, municipal solid waste only, **which is equivalent to 192,440 pounds per hour of steam**) ~~with a maximum steam production limit of 192,440 pounds per hour over average discrete four (4) hour period.~~ In addition, a maximum of 16,180 tons **of medical waste** per 12 consecutive month period for all three (3) combustor units combined without a NO_x **air pollution** control system, and 21,681 tons **of medical waste** per 12 consecutive month period for all three (3) combustor units combined with a NO_x **air pollution** control system can be burned. The facility is equipped with medical waste handling equipment. Each combustor unit is equipped with two (2) ~~186~~ **140** mmBtu per hour natural gas fired burners used for start up, shutdown, and flame stabilization.

Comment 8:

Condition D.1.1 - OMSI believes that the deadline for completion of the initial performance test is December 19, 2000.

Response 8:

The deadline for completion of the initial performance test is December 19, 2000. This change has been made as follows:

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Effective Date of NSPS 40 CFR Part 60, Subpart Cb

All conditions from the past permits, which are reflected in this permit, are applicable until 40 CFR 60, Subpart Cb becomes effective. All conditions related to 40 CFR 60, Subpart Cb will be effective after the initial performance test. **{The deadline of the initial performance test is December 19, 2000}.**

Comment 9:

Condition D.1.3 - OMSI requests that the word "may" in the second sentence be changed "will" to clarify the increased limit once the NO_x performance test is conducted.

Response 9:

This change has been made.

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (b) The NO_x emissions from the combustion of medical waste shall not exceed thirty-nine (39) tons per year. The amount of medical waste that may be combusted at the source ~~may~~ **shall** increase to 21,681 tons per 12 consecutive month period for all three (3) combustor units combined at such time that the source has installed and operated their NO_x **air pollution** control system; and the source has ~~conducted a performance test in conjunction with 40 CFR 60.30b, Subpart Cb, and~~ **demonstrated compliance with the** NO_x emission rate ~~is at or below of~~ **205 parts per million by volume (ppmv) corrected to 7% oxygen, dry basis, 24-hour daily arithmetic average using valid CEM data** while combusting both municipal and medical waste simultaneously.

Comment 10:

Condition D.1.4 - OMSI recognizes that the wording in this section is copied word-for-word from Indiana Rule 326 IAC 11-7-3, however in some cases there are clarifying language in Federal regulations that relate to these limits. In particular, NO_x limits listed in paragraph (i) are calculated as a 24-hour average to determine compliance. OMSI requests that the averaging period for this limit be clarified in the permit.

Response 10:

The change has been made to clarify the averaging time for the NO_x limit.

	Emission limits per previous operating permit	Emission limits per 40 CFR 60.30b, Subpart Cb, and 326 IAC 11-7
Nitrogen Oxides	272 parts per million by volume (ppmv), corrected to twelve percent (12%) carbon dioxide	205 parts per million by volume (ppmv) corrected to seven percent (7%) oxygen, dry basis, 24-hour daily arithmetic average

Comment 11:

Condition D.1.4 (table of emission limits) - Under the column for limits from the previous operating permits, the opacity averaging period should be 6-minutes, rather than 24-hours, while the carbon monoxide limit of 135 ppm is not corrected to dry conditions. The averaging period for NO_x should be specified as discussed above.

Response 11:

The opacity averaging period has been changed to reflect the language in OMSI's last operating permit issued May 12, 1989. The change to the carbon monoxide limit has been made. The emission table in Condition D.1.4 currently reflects the way that the limits are written in OMSI's last operating permit. The NO_x emission limit in the table has been changed according to Comment and Response 10.

	Emission limits per previous operating permit	Emission limits per 40 CFR 60.30b, Subpart Cb, and 326 IAC 11-7
--	--	--

Opacity	10% based on a 24-hour average on an average of twenty-four (24) consecutive observations recorded at fifteen (15) second intervals	10% based on a 6-minute average
Carbon Monoxide	135 parts per million by dry volume (ppm _{dv}), corrected to twelve percent (12%) carbon dioxide averaged over rolling 8-hour periods	100 parts per million by volume (ppmv) measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to seven percent (7%) oxygen, dry basis, calculated as an arithmetic mean (based on a 4-hour block averaging time)

Comment 12:

Condition D.1.6 - This condition contains an hourly and annual limit for VOC emissions. These limits (3.30 pounds per hour and 14.45 tons per year) represent the allowable limit before the addition of medical waste combustion. OMSI believes that these values should be increased to account for the addition of medical waste combustion (both before and after addition of NO_x controls).

Response 12:

The following language has been added to account for the increase in emissions from the combustion of medical waste both before and after NO_x controls. [Condition D.1.6 is later renumbered to D.1.7 according to Response 45]

D.1.6 Volatile Organic Compound Emissions

Pursuant to Operation Permit issued May 12, 1989, the total non-methane hydrocarbon (VOC) mass emission rate shall not exceed 3.30 pounds per hour and an annual emission rate of 14.45 tons **while combusting only municipal waste.**

- (a) The total non-methane hydrocarbon (VOC) mass emission rate shall not exceed 3.37 pounds per hour and an annual emission rate of 14.76 tons from the combustion of 16,180 tons of medical waste in a 12 consecutive month period without NO_x air pollution control equipment combined with the combustion of municipal waste.**
- (b) The total non-methane hydrocarbon (VOC) mass emission rate shall not exceed 3.39 pounds per hour and an annual emission rate of 14.84 tons from the combustion of 21,681 tons of medical waste in a 12 consecutive month period with NO_x air pollution control equipment combined with the combustion of municipal waste.**

Comment 13:

Condition D.1.7 - This condition, copied from the previous operating permit, should be worded "... the flue gas **oxygen** concentration **shall** not..." OMSI believes that this condition is no longer necessary given the reliance of Subpart Cb on CO levels in the flue gas. OMSI requests that this condition be removed from the permit, or that IDEM agree to evaluate whether the condition needs to be retained once the Title V permit is issued.

Response 13:

The changes to Condition D.1.7 have been made. At this time the OAM believes that this condition should remain in the permit. The OAM agrees to evaluate whether this condition needs to be retained prior to the issuance of OMSI's Title V permit. [Condition D.1.7 is later renumbered to D.1.8 according to Response 45]

D.1.7 Flue Gas ~~SO₂~~ Oxygen Concentration

Pursuant to Operation Permit issued May 12, 1989, the flue gas **oxygen** concentration ~~shall~~ **shall** not be less than three percent (3%) at the economizer outlet.

Comment 14:

Condition D.1.9(a)(1) - The phrase "Except as provided by 40 CFR 60.56b" should be deleted from this condition, as it relates to air curtain incinerators, which are not a part of this permit.

Response 14:

40 CFR 60.56b does refer to the operation of air curtain incinerators which are not present at the source. This change has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

Compliance Determination Requirements

D.1.9 Compliance and Performance testing

Pursuant to 326 IAC 11-7-7, 326 IAC 3-5, 326 IAC 3-6, 40 CFR 60.38b, Subpart Cb, and 40 CFR 60.58b, Subpart Eb as amended by 60FR 45124 (August 25, 1997)

(a) Startup/Shutdown and Malfunction

The provisions for startup, shutdown, and malfunction is provided in paragraphs (a)(1) below.

- (1) ~~Except as provided by 40 CFR 60.56b, t~~The standards under this subpart apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.

Comment 15:

Condition D.1.9(a) OMSI suggests that language defining the term "shutdown" be added to the permit to clarify the circumstances covered by this condition. Suggested language used by the State of New York is attached to these comments for consideration.

Response 15:

The following language has been added to Condition D.1.9(a) in order to define shutdown at OMSI's Indianapolis facility. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

D.1.9 Compliance and Performance testing

Pursuant to 326 IAC 11-7-7, 326 IAC 3-5, 326 IAC 3-6, 40 CFR 60.38b, Subpart Cb, and 40 CFR 60.58b, Subpart Eb as amended by 60FR 45124 (August 25, 1997) **unless otherwise**

specified.

(a) Startup/Shutdown and Malfunction

The provisions for startup, shutdown, and malfunction is provided in paragraphs (a)(1) below.

- (1) The standards under this subpart apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.
 - (i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warmup period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
 - (ii) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.
 - (iii) **The shutdown period, as defined by Ogden Martin Systems of Indianapolis, Inc., for the boiler begins when the continuous burning of solid waste is ceased and the shutdown period at the Indianapolis Resource Recovery Facility (IRRF) commences when the subject unit's feedchute damper is shut (this is the time that continuous feeding is ceased). Shutdown of a unit is complete when solid waste is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure that the fires are out and oxygen is seventeen percent (17%) or greater.**
 - (iv) **Malfunction, as defined under 40 CFR 60.2, is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.**

Comment 16:

Condition D.1.9(b) - Under subparagraph (1) reference is made to a span value of 25%. OMSI believes, under 40 CFR 60.13(d)(1) that this value should be 20%. Also, under subparagraphs (4) and (5), the term "of this part" is used. This should be changed to read "of 40 CFR Part 60".

Response 16:

The change to Condition D.1.9(b)(1) has not been made. As written, the condition reflects the NSPS language. The changes to subparagraphs (4) and (5) have been made. [Condition D.1.9 is later

renumbered to D.1.11 according to Response 45 and Response 59]

- (4) The monitor shall conform to Performance Specification 3 in appendix B of ~~this part 40 CFR Part 60~~ except for section 2.3 (relative accuracy requirement).
- (5) The quality assurance procedures of appendix F of ~~this part 40 CFR Part 60~~ except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.

Comment 17:

Condition D.1.9(c) - In other sections of the permit, the standard language from NSPS regarding valid data requirements have been incorporated [Condition D.1.9(e)(7) for example]. Similar language should be incorporated under Condition D.1.9(c) for continuous opacity monitoring.

Response 17:

The change to Condition D.1.9(c) has not been made because, as written, the condition reflects the actual NSPS language. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

Comment 18:

Condition D.1.9(c)(6) - In the introductory paragraph and under subparagraph (6), reference is made to condition (c)(11), which should read (c)(10).

Response 18:

These changes to Condition D.1.9(c)(6) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (c) **Particulate Matter and Opacity**
The procedures and test methods specified in paragraphs (c)(1) through (c)(14 ~~0~~) below shall be used to determine compliance with the emission limits for particulate matter and opacity under 40 CFR 60.33b(a)(1) and (a)(2).
- (6) In accordance with paragraphs (c)(7) and (c)(14 ~~0~~) of this section, EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(e) of subpart A.

Comment 19:

Condition D.1.9(d) - The phrase "of this section" should be changed to "below".

Response 19:

The change to Condition D.1.9(d) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (d) **Cadmium, Lead, and Mercury**
The procedures and test methods specified in paragraphs (d)(1) and (d)(2) ~~of this section~~ below shall be used to determine compliance with the emission limits for

cadmium, lead, and mercury under 40 CFR 60.33b(a)(2) and (a)(3).

Comment 20:

Condition D.1.9(d)(1) - The Citation to 40 CFR 60.52b(a)(3) and (4) should be changed to 40 CFR 60.33b(a)(2).

Response 20:

The change to Condition D.1.9(d)(1) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(d) **Cadmium, Lead, and Mercury**

- (1) The procedures and test methods specified in paragraphs (d)(1)(i) through (d)(1)(vii) below shall be used to determine compliance with the emission limits for cadmium and lead under ~~40 CFR 60.52b(a)(3) and (4)~~ **40 CFR 60.33b(a)(2)**.

Comment 21:

Condition D.1.9(d)(2) - The Citation at the end of the introductory paragraph should be 40 CFR 60.33b(a)(3).

Response 21:

The change to Condition D.1.9(d)(2) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(d) **Cadmium, Lead, and Mercury**

- (2) The procedures and test methods specified in paragraphs (d)(2)(i) through (d)(2)(x) below shall be used to determine compliance with the mercury emission limit under 40 CFR 60.33b(a)(3).

Comment 22:

Condition D.1.9(d)(2) - Under subparagraphs (vii) and (x), the phrase "of this section" should be changed to read "of this permit".

Response 22:

"Of this section" in Condition D.1.9(d)(2)(vii) and (x) is referring to a previous portion of Condition D.1.9 which is taken from 40 CFR 60.58b. The OAM has made the following change in order to clarify the reference to "of this section". [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(d) **Cadmium, Lead, and Mercury**

- (2) The procedures and test methods specified in paragraphs (d)(2)(i) through (d)(2)(x) below shall be used to determine compliance with the mercury emission limit under 40 CFR 60.33b(a)(3).

- (vii) An owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) ~~of this section~~ **of 40 CFR 60.58b**.
- (x) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in paragraph (l) ~~of this section~~ **of 40 CFR 60.58b** for measuring and calculating carbon usage.

Comment 23:

Condition D.1.9(e) - The regulatory citation at the end of this paragraph should be "40 CFR 60.33b(b)(1)."

Response 23:

The change to Condition D.1.9(e) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (e) **Sulfur Dioxide**
The procedures and test methods specified in paragraphs (e)(1) through (e)(13) of this section shall be used for determining compliance with the sulfur dioxide emission limit under 40 CFR 60.33b(b)(1).

Comment 24:

Condition D.1.9(e)(11) - The phrase "of this part" in the introductory paragraph and in subparagraph (i) should read "of 40 CFR Part 60"

Response 24:

The changes to Condition D.1.9(e)(11) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (e) **Sulfur Dioxide**
 - (11) The continuous emission monitoring system shall be operated according to Performance Specification 2 in appendix B of ~~this part~~ **40 CFR Part 60**.
 - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in appendix B of ~~this part~~ **40 CFR Part 60**, sulfur dioxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (e)(11)(i)(A) and (e)(11)(i)(B) below.

Comment 25:

Condition D.1.9(f) - The Citation at the end of the introductory paragraph should be "40 CFR 60.33b(b)(2)."

Response 25:

The change to Condition D.1.9(f) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (f) **Hydrogen Chloride**
The procedures and test methods specified in paragraphs (f)(1) through (f)(7) of this section shall be used for determining compliance with the hydrogen chloride emission limit under 40 CFR 60.33b(b)(2).

Comment 26:

Condition D.1.9(f)(4) - The phrase "of this section" should read "of this permit."

Response 26:

"Of this section" in Condition D.1.9(f)(4) is referring to a previous portion of Condition D.1.9 which is taken from 40 CFR 60.58b. The OAM has made the following change in order to clarify the reference to "of this section". [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (f) **Hydrogen Chloride**

(4) An owner or operator of an affected facility may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) of this section of **40 CFR 60.58b**.

Comment 27:

Condition D.1.9(g) - The Citation at the end of the introductory paragraph should be "40 CFR 60.33b(c).

Response 27:

The change to Condition D.1.9(g) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (g) **Dioxin/Furan**
The procedures and test methods specified in paragraphs (g)(1) through (g)(9) of this section shall be used to determine compliance with the limits for dioxin/furan emissions under 40 CFR 60.33b(b)(c).

Comment 28:

Condition D.1.9(g)(5) – The introductory paragraph should read "...in accordance with paragraph (g)(3) of this section above , according to one of the schedules specified in paragraphs (g)(5)(i) through (g)(5)(ii) of this section below.

Response 28:

The changes to Condition D.1.9(g)(5) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(g) **Dioxin/Furan**

- (5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (g)(3) ~~of this section~~ **above**, according to one of the schedules specified in paragraphs (g)(5)(i) through (g)(5)(ii) ~~of this section~~ **below**.

Comment 29:

Condition D.1.9(g)(5)(ii) - The exemption level for dioxin testing is 15 ng/dscm rather than 7 ng/dscm. This is provided for in 40 CFR 60.38b(b) (copy attached).

Response 29:

The changes to Condition D.1.9(g)(5)(ii) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(g) **Dioxin/Furan**

- (5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (g)(3) above, according to one of the schedules specified in paragraphs (g)(5)(i) through (g)(5)(ii) below.
- (ii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to ~~7~~ **15** nanograms per dry standard cubic meter (total mass), **corrected to 7 percent oxygen**, for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence.

Comment 30:

Condition D.1.9(g)(7) - The phrase "of this section" should read "above."

Response 30:

The change to Condition D.1.9(g)(7) has been made. [Condition D.1.9 is later renumbered to D.1.11

according to Response 45 and Response 59]

(g) **Dioxin/Furan**

- (7) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan emission limits specified in 40 CFR 60.33b(c) or the dioxin/furan emission level specified in paragraph (g)(5)(ii) ~~of this section~~ **above** shall follow the procedures specified in paragraph (l) of this section for measuring and calculating the carbon usage rate.

Comment 31:

Condition D.1.9(g)(8) and (h)(2) - The phrase "of this section" should read "of this permit."

Response 31:

"Of this section" in Condition D.1.9(g)(8) and (h)(2) is referring to a previous portion of Condition D.1.9 which is taken from 40 CFR 60.58b. The OAM has made the following change in order to clarify the reference to "of this section". [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(g) **Dioxin/Furan**

- (8) An owner or operator of an affected facility may request that compliance with the dioxin/furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) ~~of this section~~ **of 40 CFR 60.58b.**

(h) **Nitrogen Oxides**

- (2) An owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) ~~of this section~~ **of 40 CFR 60.58b.**

Comment 32:

Condition D.1.9(h)(6) - The phrase "of this section" should read "below."

Response 32:

The change to Condition D.1.9(h)(6) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(h) **Nitrogen Oxides**

- (6) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (h)(6)(i) and (h)(6)(ii) ~~of this section~~ **below** for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.

Comment 33:

Condition D.1.9(h)(7) and (8) - The phrase "of this section" should read "of this permit."

Response 33:

"Of this section" in Condition D.1.9(h)(7) and (h)(8) is referring to a previous portion of Condition D.1.9 which is taken from 40 CFR 60.58b. The OAM has made the following change in order to clarify the reference to "of this section". [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(h) **Nitrogen Oxides**

- (7) The 1-hour arithmetic averages required by paragraph (h)(5) ~~of this section of 40 CFR 60.58b~~ shall be expressed in parts per million by volume (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2) of subpart A of 40 CFR Part 60.
- (8) All valid continuous emission monitoring system data must be used in calculating emission averages even if the minimum continuous emission monitoring system data requirements of paragraph (h)(6) ~~of this section of 40 CFR 60.58b~~ are not met.

Comment 34:

Condition D.1.9(h)(7) - The phrase "of this part" should read "of 40 CFR Part 60."

Response 34:

The change to Condition D.1.9(h)(7) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(h) **Nitrogen Oxides**

- (7) The 1-hour arithmetic averages required by paragraph (h)(5) of this section shall be expressed in parts per million by volume (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2) of subpart A of ~~this part~~ **40 CFR Part 60**.

Comment 35:

Condition D.1.9(h)(10) - The phrase "of this section" in the introductory paragraph and under subparagraph (i) should read "below."

Response 35:

The changes to Condition D.1.9(h)(10) and D.1.9(h)(10)(i) have been made. [Condition D.1.9 is later

renumbered to D.1.11 according to Response 45 and Response 59]

(h) **Nitrogen Oxides**

- (10) The owner or operator of an affected facility shall operate the continuous emission monitoring system according to Performance Specification 2 in appendix B of this part and shall follow the procedures and methods specified in paragraphs (h)(10)(i) and (h)(10)(ii) ~~of this section~~ **below**.
- (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 of appendix B of this part, nitrogen oxides and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (h)(10)(i)(A) and (h)(10)(i)(B) ~~of this section~~ **below**.

Comment 36:

Condition D.1.9(i) - The phrase "of this section" should read "below."

Response 36:

The change to Condition D.1.9(i) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
The procedures specified in paragraphs (i)(1) through (i)(11) ~~of this section~~ **below** shall be used for determining compliance with the operating requirements under 40 CFR 60.53b.

Comment 37:

Condition D.1.9(i) - The Citation at the end of the paragraph and in subparagraph (1) should be "40 CFR 60.34b."

Response 37:

The changes to Condition D.1.9(i), introductory paragraph, have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
The procedures specified in paragraphs (i)(1) through (i)(11) below shall be used for determining compliance with the operating requirements under 40 CFR ~~60.53b~~ **60.34b**.
- (1) Compliance with the carbon monoxide emission limits in 40 CFR ~~60.53b(a)~~ **60.34b(a)** shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers.

Comment 38:

Condition D.1.9(i)(1) - The phrase “for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse derived fuel stokers” should be deleted as this does not relate to the Indianapolis facility.

Response 38:

The change to Condition D.1.9(i)(1) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (1) Compliance with the carbon monoxide emission limits in 40 CFR 60.34b(a) shall be determined using a 4-hour block arithmetic average. ~~for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse derived fuel stokers.~~

Comment 39 and 40:

Condition D.1.9(i)(2) - the end of this paragraph should read “...specified in paragraphs (i)(3)(2)(i) through (i)(3)(2)(iii) **of this section below**.” In addition, the phrase “of this part” in subparagraphs (i) and (ii) should read “of 40 CFR Part 60.” Condition D.1.9(i)(2)(ii) - The phrase “of this section” should read “below.”

Response 39 and 40:

The changes to Condition D.1.9(i)(2)(i) and (ii) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (2) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs (i)(3)(2)(i) through (i)(3)(2)(iii) **of this section below**.
 - (i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in appendix B **of this part of 40 CFR Part 60**.
 - (ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in appendix B **of this part of 40 CFR Part 60**, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (i)(2)(ii)(A) and (i)(2)(ii)(B) **of this section below**.

Comment 41:

Condition D.1.9(i)(3) - The phrase “of this section” should read “above.”

Response 41:

The change to Condition D.1.9(i)(3)(i) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (3) The 4-hour block average specified in paragraphs (i)(1) ~~of this section above~~ shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.

Comment 42:

Condition D.1.9(i)(4) - The phrase "of this section" should read "of this permit."

Response 42:

"Of this section" in Condition D.1.9(i)(4) is referring to a previous portion of Condition D.1.9 which is taken from 40 CFR 60.58b. The OAM has made the following change in order to clarify the reference to "of this section". [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (4) An owner or operator of an affected facility may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (b)(6) ~~of this section of 40 CFR 60.58b~~.

Comment 43:

Condition D.1.9(i)(5) - The phrase "of this section" should read "below". In addition, the regulatory citation should be changed from 40 CFR 60.53b(b) to 60.34b(b).

Response 43:

The changes to Condition D.1.9(i)(5) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (5) The procedures specified in paragraphs (i)(5)(i) through (i)(5)(v) ~~of this section below~~ shall be used to determine compliance with load level requirements under 40 CFR 60.534b(b).

Comment 44:

Condition D.1.9(i)(6) - The Citation should read "40 CFR 60.34b(b)."

Response 44:

The change to Condition D.1.9(i)(6) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (6) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR ~~60.53b(e)~~ **60.34b(b)**, the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.

Comment 45:

Condition D.1.9(i)(7) - In 40 CFR 60.53b(b), USEPA provides specifications for determining the maximum allowable load on combustors on the basis of the most recent dioxin/furan stack test. Beginning with the last sentence, OMSI suggests that this subcondition be modified as follows:

"The maximum demonstrated municipal waste combustor unit load shall be ~~the 110% of the~~ highest 4-hour arithmetic... limit was achieved **except as specified in paragraphs (i)(7)(1) AND (i)(7)(2) below:**

- (1) **During the annual dioxin/furan performance test and the two weeks preceding the annual dioxin/furan performance test, no municipal waste combustor unit load limit is applicable.**
- (2) **The municipal waste combustor load limit may be waived in accordance with the permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions."**

Response 45:

As written, this condition reflects the language in the New Source Performance Standard (NSPS). The OAM does not believe the condition should be changed to reflect 110% of the highest 4-hour arithmetic average as suggested by OMSI. Condition D.1.9(i)(7) gives the definition for the maximum demonstrated municipal waste combustor unit load and when it should be determined. The language that OMSI is proposing to add to the condition defines the exceptions when the maximum demonstrated municipal waste combustor unit load is not applicable. The suggested language is taken directly from 40 CFR 60.53b(b). A condition has been added to Section D to reflect the applicable language from 40 CFR 60.53b(b) and (c). The OAM does not believe that it is appropriate to add the suggested language to the Condition D.1.9(i)(7). Subsequent conditions in Section D.1 were renumbered accordingly to

accommodate the following addition.

D.1.6 Operation Practices

Pursuant to 326 IAC 11-7-4 and 40 CFR 60.53b(b) and (c), Subpart Eb, as amended by 60 FR 45124 (August 25, 1997).

(a) Unit Capacity Limits

No owner or operator of an affected facility shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in 40 CFR 60.51b, except as specified in 40 CFR 60.53b(b)(1) and (b)(2). The averaging time is specified under 40 CFR 60.58b(i).

- (1)** During the annual dioxin/furan performance test and the 2 weeks preceding the annual dioxin/furan performance test, no municipal waste combustor unit load limit is applicable.
- (2)** The municipal waste combustor unit load limit may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

(b) PM Controls

No owner or operator of an affected facility shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding seventeen degrees Celsius (17°C) above the maximum demonstrated particulate matter control device temperature as defined in 40 CFR 60.51b, except as specified in paragraphs (b)(1) and (b)(2) below. The averaging time is specified under 40 CFR 60.58b(i). The requirements specified in this paragraph apply to each particulate matter control device utilized at the affected facility.

- (1)** During the annual dioxin/furan performance test and the 2 weeks preceding the annual dioxin/furan performance test, no particulate matter control device temperature limitations are applicable.
- (2)** The particulate matter control device temperature limits may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

Comment 46:

Condition D.1.9(i)(8) - In 40 CFR 60.53b(c), USEPA provides specifications for determining the maximum allowable control device inlet temperature on the basis of the most recent dioxin/furan stack

test. Beginning with the last sentence, OMSI suggests that this subcondition be modified as follows:

"The maximum demonstrated particulate matter control device temperature shall be not exceed 17EC above the highest ... limit was achieved, except as specified in paragraphs (i)(8)(1) and (i)(8)(2) below:

- (1) During the annual dioxin/furan performance test and the two weeks preceding the annual dioxin/furan performance test, no particulate matter control device limit is applicable.**
- (2) The particulate matter control device temperature limits may be waived in accordance with the permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions."**

Response 46:

As written, this condition reflects the language in the New Source Performance Standard (NSPS). The OAM does not believe the condition should be changed to reflect, "not exceed 17EC above", as suggested by OMSI. Condition D.1.9(i)(8) gives the definition particulate matter control device temperature and when it should be determined. The language that OMSI is proposing to add to the condition defines the exceptions when the maximum demonstrated municipal waste combustor unit load is not applicable. The suggested language is taken directly from 40 CFR 60.53b(c). A condition has been added to Section D to reflect the applicable language from 40 CFR 60.53b(b) and (c). The OAM does not believe that it is appropriate to add the suggested language to the Condition D.1.9(i)(8). (See Response 45)

Comment 47:

Condition D.1.9(i)(9) - The phrase "of this section" should read "below."

Response 47:

The change to Condition D.1.9(i)(9) has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- (i) Operating Practices (carbon monoxide, capacity limits, and PM controls)**
 - (9) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i)(9)(i) and (i)(9)(ii) of this section below for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.**

Comment 48:

Condition D.1.9(i)(10) - The first sentence should be reworded to read "All valid ... under paragraphs **(9)(i) of this section above** even if the minimum data requirements of paragraph (i)(9) **of this section above** are not met."

Response 48:

The first and second changes to Condition D.1.9(i)(10) reflect the language in 40 CFR Part 60. The OAM does not believe that the reference to (i) in Condition D.1.9(i)(10) was intended to be (9)(i). This change will not be made. The reference to the first "of this section" will be changed to "of 40 CFR 60.58b". The third change has been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

(i) **Operating Practices (carbon monoxide, capacity limits, and PM controls)**

- (10) All valid continuous emission monitoring system data must be used in calculating the parameters specified under paragraph (i) ~~of this section of 40 CFR 60.58b~~ even if the minimum data requirements of paragraph (i)(9) ~~of this section above~~ are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.

Comment 49:

Condition D.1.9(j) - This clause is included in Federal rules for the sole purpose of determining if a plant is large or not. OMSI recommends that this entire section be deleted.

Response 49:

The OAM has decided to remove D.1.9(j) from the permit. Subsequent subsections have been renumbered accordingly. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59]

- ~~(j) **Maximum Charging Rate and Unit Capacity**~~
~~The procedures specified in paragraphs (j)(1) and (j)(2) of this section shall be used for calculating municipal waste combustor unit capacity as defined under 40 CFR 60.51b.~~
- ~~(1) For municipal waste combustor units capable of combusting municipal solid waste continuously for a 24-hour period, municipal waste combustor unit capacity, shall be calculated based on 24 hours of operation at the maximum charging rate. The maximum charging rate shall be determined as specified in paragraphs (j)(1)(i) and (j)(1)(ii) of this section as applicable.~~
- ~~(i) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel.~~
- ~~(ii) For combustors that are not designed based on heat capacity, the maximum charging rate shall be the maximum design charging rate.~~

~~(2) For batch feed municipal waste combustor units, municipal waste combustor unit capacity, shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period). For batch combustors that are designed based on heat capacity, the design heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel shall be used in calculating the municipal waste combustor unit capacity in megagrams per day of municipal solid waste.~~

Comment 50:

Condition D.1.9(k) - The phrase "of this section" should read "below", while the Citation at the end of this sentence should read "40 CFR 60.36b."

Response 50:

The first change to Condition D.1.9(k) has been made. The rule citation in Condition D.1.9(k) as it is currently written references the actual fugitive ash emission limit. 40 CFR 60.36b does not state the fugitive ash emission limit it references 40 CFR 60.55b. The rule citation will not be changed. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59. D.1.9(k) has been renumbered to D.1.9(j) according to Response 49.]

(k) Fugitive Ash Emissions

The procedures specified in paragraphs (k)(1) through (k)(4) ~~of this section~~ **below** shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b.

Comment 51:

Condition D.1.9(k)(1) and (2) - The Citation 40 CFR 60.55b should be changed to 40 CFR 60.36b.

Response 51:

The rule citation in Condition D.1.9(k)(1) and (2) as it is currently written references the actual fugitive ash emission limit. 40 CFR 60.36b does not state the fugitive ash emission limit it references 40 CFR 60.55b. The rule citation will not be changed. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59. D.1.9(k) has been renumbered to D.1.9(j) according to Response 49.]

Comment 52:

Condition D.1.9(k)(3) and (4) - The phrase "of this part" should be changed to read "of 40 CFR Part 60."

Response 52:

The changes to Conditions D.1.9(k)(3) and (4) have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59. D.1.9(k) has been renumbered to D.1.9(j) according to Response 49.]

(k) **Fugitive Ash Emissions**

- (3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8 of subpart A of ~~this part~~ **40 CFR Part 60**.
- (4) Following the date that the initial performance test for fugitive ash emissions is completed under 40 CFR 60.8 of subpart A of ~~this part~~ **40 CFR Part 60** for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

Comment 53:

Condition D.1.9(l) - The reference to 40 CFR 60.58b(g)(5)(ii) should be changed to 40 CFR 60.38b(b), while the phrase "of this section" should be changed to read "of this permit" in the introductory paragraph.

Response 53:

The first change to Condition D.1.9(l) has been made. The OAM believes that the "below" would be a better clarification of the location of the information in the permit. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59. D.1.9(l) has been renumbered to D.1.9(k) according to Response 49.]

(l) **Carbon Injection**

The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit under 40 CFR 60.33b(a), or the dioxin/furan emission limits under 40 CFR 60.33b(c), or the dioxin/furan emission level specified in 40 CFR ~~60.58b(g)(5)(ii)~~ **60.38b(b)** shall follow the procedures specified in paragraphs (l)(1) through (l)(3) ~~of this section~~ **below**.

Comment 54:

Condition D.1.9(l) - OMSI has indicated to IDEM its intent to utilize a gravimetric feeder for carbon injection, and suggests that the wording of this condition be reworded to reflect this fact. There are several phrases "of this section" which should be changed accordingly.

Response 54:

Language has been added to Condition D.1.9(l) to indicate that OMSI intends to utilize a gravimetric feeder for carbon injection. The other changes related to "of this section" have been made. [Condition D.1.9 is later renumbered to D.1.11 according to Response 45 and Response 59. D.1.9(l) has been renumbered to D.1.9(k) according to Response 49.]

(I) **Carbon Injection**

The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit under 40 CFR 60.33b(a), or the dioxin/furan emission limits under 40 CFR 60.33b(c), or the dioxin/furan emission level specified in 40 CFR 60.38b(b) shall follow the procedures specified in paragraphs (I)(1) through (I)(3) below.

- (1) During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified in paragraphs (I)(1)(i) and (I)(1)(ii) ~~of this section~~ **below**.
 - (i) An average carbon mass feed rate in ~~kilograms per hour or~~ pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions.
 - (ii) An average carbon mass feed rate in pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions.
- (2) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) must equal or exceed the level(s) documented during the performance tests specified under paragraphs (I)(1)(i) and (I)(1)(ii) ~~of this section~~ **above**.
- (3) The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs (I)(3)(i) and (I)(3)(ii) ~~of this section~~ **below**.
 - (i) The weight of carbon delivered to the plant.
 - (ii) Estimate the average carbon mass feed rate in pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (I)(1) ~~of this section~~ **above**, and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.

Ogden Martin Systems of Indianapolis, Inc., intends to utilize a gravimetric feeder to estimate carbon mass feed rate for the carbon injection system to comply with the mercury emission limit under 40 CFR 60.33b(a), or the dioxin/furan emission limits under 40 CFR 60.33b(c), or the dioxin/furan emission level specified in 40 CFR 60.38b(b).

Comment 55:

Condition D.1.10 - OMSI believes that the schedule outlined in this section has not yet been approved by

USEPA, and therefore is state enforceable only. Accordingly, the Federal default schedule should be added with a qualification that it will be replaced by the state schedule upon approval of Indiana Rule 326 IAC 11-7.

Response 55:

Condition D.1.10(d) states - "Notwithstanding the requirements of this section, the designated facility shall comply with the compliance schedule in the federal plan until the state plan is approved by the U.S. EPA.". The OAM believes that no change to this condition is necessary to clarify the condition. [Condition D.1.10 is later renumbered to D.1.12 according to Response 45 and Response 59.]

Comment 56:

Condition D.1.10(a)(2)(C) - This condition includes the phrase "within one year from the effective date of this rule." This phrase should be replaced with a specific date.

Response 56:

The change to Condition D.1.10(a)(2)(C) has been made. [Condition D.1.10 is later renumbered to D.1.12 according to Response 45 and Response 59.]

D.1.101 Compliance Schedule

- (a) Pursuant to 326 IAC 11-7-9, Designated facilities shall be in compliance with this rule (326 IAC 11-7), except section 5 of this rule, according to one (1) of the following compliance schedules:
 - (1) ~~Within one (1) year from the effective date of this rule~~ **By February 17, 2000**, but not later than December 19, 2000.
 - (2) By December 19, 2000, provided the following:
 - (C) Designated facilities that are not in compliance ~~within one (1) year from the effective date of this rule~~ **by February 17, 2000**, must submit performance test results for dioxin/furan emissions that have been conducted during or after 1990.

Comment 57:

Part 70 Source Modification Quarterly Report Form - The description that corresponds to the item "Parameter" should read "medical waste throughput (no NO_x **air pollution control** equipment)."

Response 57:

The change to the Source Modification Quarterly Report Form has been made.

Part 70 Source Modification Quarterly Report

Source Name: Ogden Martin Systems of Indianapolis, Inc.
Source Address: 2320 South Harding Street, Indianapolis, IN 46221
Mailing Address: 4 Lane Road, Fairfield, NJ 07007
Source Modification No.: 097-10550-00123
Facility: combustor units - EU1, EU2, and EU3
Parameter: medical waste throughput (no NO_x **air pollution control** equipment)
Limit: 16,180 tons per 12 consecutive month period, NO_x emissions from burning medical waste less than 40 tons per year

Comment 58:

Part 70 Source Modification Quarterly Report Form - The reference to "(NO_x " at the end of the parameter line should be deleted.

Response 58:

The reference to NO_x in the Source Modification Quarterly Report Form was not deleted. However, a phrase was added to clarify reporting after the installation and operation of NO_x control equipment.

Part 70 Source Modification Quarterly Report

Source Name: Ogden Martin Systems of Indianapolis, Inc.
Source Address: 2320 South Harding Street, Indianapolis, IN 46221
Mailing Address: 4 Lane Road, Fairfield, NJ 07007
Source Modification No.: 097-10550-00123
Facility: combustor units - EU1, EU2, and EU3
Parameter: medical waste throughput (**with NO_x air pollution control equipment**)
Limit: 21,681 tons per 12 consecutive month period, NO_x emissions from burning medical waste less than 40 tons per year

Comment 59:

Technical Support Document (Federal Rule Applicability) - OMSI believes that NSPS subparts Db and E are also applicable to the facility. However, the facility is exempt from Subpart Db if the annual capacity factor for auxiliary fuel as defined in 40 CFR Part 60 of 10% or more.

Response 59:

The OMSI facility is applicable to 40 CFR 60, Subpart E (Standards of Performance for Incinerators). Compliance with the particulate limit in Subpart Cb will satisfy the requirement of Subpart E. A compliance monitoring condition has been added to the permit pursuant to Subpart E. The following additions have been made.

D.1.4 Emission Limits [326 IAC 11-7-3][40 CFR 60, Subpart Cb]

Compliance with the particulate limit in Condition D.1.4(a) will also satisfy the particulate limit requirement in 40 CFR 60, Subpart E.

Compliance Monitoring Requirements

D.1.14 Monitoring of Operations

Pursuant to 40 CFR 60.53, Subpart E, the owner or operator of any incinerator subject to the provisions of 40 CFR Subpart E shall record the daily charging rates and hours of operation.

The OMSI facility is applicable to 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units). Pursuant to 40 CFR 60.40b, affected facilities which also meet the applicability requirements under 40 CFR 60, Subpart E (Standards of Performance for Incinerators) are subject to the nitrogen oxides and particulate matter standards under 40 CFR 60, Subpart Db.

Compliance with the particulate matter limit in 40 CFR 60, Subpart Cb, will satisfy the particulate limit in 40 CFR 60, Subpart Db. The source is accepting an annual capacity factor of 10% on natural gas use in order to render the NO_x limit in 40 CFR 60, Subpart Db, not applicable. Language has been added to reference the situations above. Subsequent conditions have been renumbered accordingly.

D.1.4 Emission Limits [326 IAC 11-7-3][40 CFR 60, Subpart Cb]

Compliance with the particulate limit in Condition D.1.4(a) will also satisfy the particulate limit requirement in 40 CFR 60, Subpart Db.

D.1.9 Natural Gas Capacity

The facility is limited to an annual capacity factor of ten percent (10%) or less for natural gas use.

Compliance with this limit will render the requirements of 40 CFR 60.44b, Subpart Db, not applicable.

Comment 60:

Technical Support Document (State Rule Applicability) - Discussion under 326 IAC 2-2 regarding the applicability of PSD rules before the installation of NO_x emission controls should also include discussion of the appropriate limit (21,681 tons per year) after NO_x controls are in place.

Response 60:

As stated above, the OAM prefers that the Technical Support Document (TSD) reflect the document that was public noticed. Therefore, the TSD will not be changed, however, in the discussion regarding State Rule Applicability, 326 IAC 2-2, the increase in the amount of medical waste to 21,681 tons per year after NO_x control installation and operation should have been included.

Comment 61:

Technical Support Document (Compliance Requirements) - In the fourth paragraph there is a reference to Subpart Ce that should be Cb.

Response 61:

As stated above, the OAM prefers that the Technical Support Document (TSD) reflect the document that was public noticed. Therefore, the TSD will not be changed, however, the reference to Subpart Ce in the fourth paragraph of the Compliance Requirements of the TSD should have been Subpart Cb.

Comment 62:

Technical Support Document (Compliance Requirements) - Under paragraph 7, the exemption level for dioxin/furan should be 15 ng/dscm, as discussed above.

Response 62:

As stated above, the OAM prefers that the TSD reflect the document that was public noticed. Therefore, the TSD will not be changed, however, the exemption level for dioxin/furan should be 15 ng/dscm.

Comment 63:

Technical Support Document (Compliance Requirements) - Under paragraph 8, the reference to 40 CFR 60.52b(d) should be 60.33b(d).

Response 63:

As stated above, the OAM prefers that the TSD reflect the document that was public noticed. Therefore, the TSD will not be changed, however, the reference to 40 CFR 60.52b(d) should have been 60.33b(d).

Comment 64:

Technical Support Document (Compliance Requirements) - Under paragraph 9, the reference to 40 CFR 60.53b(a) should be changed to 60.34b(a).

Response 64:

As stated above, the OAM prefers that the TSD reflect the document that was public noticed. Therefore, the TSD will not be changed, however, the reference to 40 CFR 60.53b(a) should have been 60.34b(a).

Comment 65:

Technical Support Document (Compliance Requirements) - Under paragraph 11, the reference to 60.53b(c) should be changed to 60.33b(c), while reference to 60.52b(c) should be changed to 60.33b(d). Subsequent discussion in this paragraph regarding applicable particulate matter control device inlet temperature limits should be changed as discussed above in the body of the permit.

Response 65:

As stated above, the OAM prefers that the TSD reflect the document that was public noticed. Therefore, the TSD will not be changed, however, the references to rule citations under paragraph 11 of Compliance Requirements should have reflected those rule citations that were discussed above and changed in the body of the permit.

Comment 66:

Technical Support Document (Compliance Requirements) - At the end of this discussion on page 7, there is another reference to Subpart Ce that should be Cb.

Response 66:

As stated above, the OAM prefers that the TSD reflect the document that was public noticed. Therefore, the TSD will not be changed, however, the reference to Subpart Ce and the end of the Compliance Requirements section should have been Subpart Cb.

Comment 67:

OMSI wishes to clarify its understanding of the intent and requirements of proposed permit condition C.11, which relates to the requirement to have a Compliance Monitoring Plan. In other facilities operated by Ogden Martin, the regulatory agency has provided Ogden with a letter which states that the facility is considered to be operating in compliance so long as it follows compliance monitoring, record keeping, and reporting requirements of Federal New Source Performance Standards (NSPS). While the proposed Indianapolis permit does not state this, it is OMSI's understanding that compliance provisions contained within the permit are essentially those of NSPS. Thus, the permit requires the following with regard to Compliance Monitoring:

- C Compliance Determination Requirements - Condition D.1.9 (which incorporate NSPS requirements for the following: Startup/shutdown and malfunctions; CEMS (oxygen or carbon dioxide content); Particulate matter; Opacity; Cadmium, lead, and mercury; Sulfur dioxide; Hydrogen chloride; Dioxin/furan; Nitrogen oxides; Operating practices (carbon monoxide, capacity limits, and PM controls); Steam load for unit capacity; Fugitive ash emissions; and Carbon injection.
- C Compliance Monitoring Requirements - Although referenced in the general language of Condition C.11, there are no compliance monitoring requirements contained within Section D.
- C Record Keeping and Reporting Requirements - This includes several conditions within Section C (Discussed below) as well as Conditions D.11 and D.12, which require that records of the quantity of medical waste combusted be maintained and reported quarterly.

Response 67:

(See Response 4)

Comment 68:

Condition C.14 contains general language related to record keeping requirements for the plant. OMSI wishes to confirm its understanding of the scope of this requirement, since the plant maintains records of a considerable amount of information, much of which does not relate to air pollution emissions or to provisions of the air pollution control permit. OMSI understands this condition to apply to : Stack test records; Continuous emissions/opacity monitoring records; Calibration records for air monitoring equipment; Records of certain operational parameters specifically identified in the permit, including carbon injection rate, steam production rate, and baghouse inlet temperature; Maintenance records, to the extent that equipment covered by such records relates to the monitoring of emissions or to activities that may impact upon emission levels; and Records of quantity of medical waste combusted.

Response 68:

(See Response 6)

Comment 69:

As noted during our discussion on July 1, 1999, OMSI does not believe that some of the emission limitations contained in Indiana Rule 326 IAC 11-7 are accurate conversions of emission limitations contained in 40 CFR Part 60, Subpart Cb or in OMSI's current PSD permit. While OMSI acknowledges that the limits contained in the draft permit correctly reflect the language of 326 IAC 11-7, it wishes to further discuss with IDEM steps to clarify this inconsistency.

Response 69:

The only pollutant that this comment is referring to is particulate matter. The current permit limit for particulate matter is 0.01 grains per dry standard cubic foot (gr/dscf), corrected to twelve percent (12%) carbon dioxide. When converted, the 0.01gr/dscf is equivalent to 23 mg/dscm, corrected to twelve percent (12%) carbon dioxide. This limit was not meant to be a conversion of the limit in 40 CFR Part 60, but rather a limit that was comparable to OMSI's current permit limit.

Comment 70:

Condition D.1.9(I) contains language that discusses, in general terms, requirements to install and operate a carbon injection system. Although the permit does not specify the manner of carbon injection to be used, OMSI wishes to confirm that IDEM has received, reviewed, and approved OMSI's proposal to utilize a gravimetric carbon injection system on each unit at the Indianapolis plant.

Response 70:

OMSI's proposal has been received by IDEM - OAM. Language has been added to Condition D.1.9(I) to clarify the method by which OMSI will comply with the requirement.

On July 13, 1999, a public hearing was held to discuss the draft Significant Source Modification. A summary of the comments and issues raised at the public hearing is as follows (comments regarding the same topic or issue have been grouped together). (Deleted language appears as ~~strikeouts~~ and the new language is **bolded**.)

Comment 71: Mercury and Dioxins

What will the burning of medical waste do to the greater Indianapolis community?

What are the specific mercury numeric limits that OMSI has before and will they be changed after the permit is issued?

As written the permit allows increases for both dioxin and mercury. Recommended that IDEM require OMSI to not let mercury containing products into the facility. Recommend OMSI participate in agreements with the medical facilities that would be using their services to eliminate mercury from the waste stream. Thinks IDEM should look into other practices of medical waste treatment before allowing OMSI to handle the waste.

The permit should have a program with each hospital to prevent mercury-containing materials from

getting into the waste that goes into the incinerator. The effectiveness of this program should be verifiable in order to show that in fact mercury-containing materials are not entering the waste stream.

Concern that IDEM drew the conclusion that municipal solid waste and medical waste are the same thing from an emission standpoint. Suggests source segregation. Enforceable conditions to ensure that mercury is being removed from the waste stream. Think about hazardous waste and try to come up with more realistic numbers for mercury unless we are going to impose conditions that stop this from happening.

Develop estimates of the amount of mercury reductions that could be achieved by the use of OMSI's incinerator when compared to potential emissions from uncontrolled hospital incinerators. It would be helpful to understand the aggregate impacts.

Research the ultimate disposition of the mercury collected on the carbon in the incinerator. EPA acknowledged in its draft mercury action plan that it does not know what happens to the mercury. The emissions may simply be delayed to the future. If the landfill breathes due to atmospheric pressure change or biological decomposition in the landfill, the mercury may volatilize from the carbon and be exhausted in the landfill gas. Unless the mercury is tied up as an amalgam, it is likely to eventually reach the air.

Response 71:

The medical waste in the Indianapolis area is currently being burned in uncontrolled incinerators at a number of sources. By shifting this waste stream to OMSI, the waste will be burned in a controlled incinerator. There are currently federal and state regulations for both the municipal waste combustor at the OMSI facility and the medical waste incinerators. The regulations that govern the emissions and operations at the OMSI facility are more stringent than the regulations that govern medical waste incinerators. Therefore, even if the medical waste generators were to retrofit their incinerators, they would still not have to comply with federal and state regulations to the extent that OMSI must comply with federal and state regulations. The following table compares the two regulations and their limits.

Emissions Limitations	Medical Waste Incinerator (326 IAC 11-6 and 40 CFR 60, Subpart Ce and Ec)	Municipal Waste Combustor (326 IAC 11-7 and 40 CFR 60, Subpart Cb and Eb)
Particulate Matter	34 mg/dscm, corrected to 7% oxygen, dry basis	23mg/dscm, corrected to 12% carbon dioxide
Carbon Monoxide	40 ppmv, corrected to 7% oxygen, dry basis	100 ppmv, measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7% oxygen, dry basis, calculated as an arithmetic mean (based on a 4-hour block averaging time)
Dioxins/furans	125 ng/dscm total dioxins/furans, corrected to 7% oxygen, dry basis	30 ng/dscm total mass, corrected to 7% oxygen
Hydrogen chloride	100 ppmv, corrected to 7% oxygen, dry basis (or 93% reduction)	29 ppmv, corrected to 7% oxygen, dry basis (or 5% of the potential hydrogen chloride emissions concentration)

Sulfur Dioxide	55 ppmv, corrected to 7% oxygen, dry basis	29 ppmv, corrected to 7% oxygen, dry basis, calculated as a 24-hour daily geometric mean (or 20% of the potential sulfur dioxide emission concentration)
Nitrogen Oxides	250 ppmv, corrected to 7% oxygen, dry basis	205 ppmv, corrected to 7% oxygen, dry basis, 24-hour daily arithmetic average
Lead	1.2 mg/dscm, corrected to 7% oxygen, dry basis (or 70% reduction)	0.44 mg/dscm, corrected to 7% oxygen
Cadmium	0.16 mg/dscm, corrected to 7% oxygen, dry basis	0.040 mg/dscm, corrected to 7% oxygen
Mercury	0.55 mg/dscm, corrected to 7% oxygen, dry basis (or 85% reduction)	0.080 mg/dscm, corrected to 7% oxygen (or 15% of the potential mercury emissions concentration)

OMSI currently does not have a dioxin/furan limit in their operating permit. The federal and state municipal waste combustor regulations will impose a dioxin/furan limit and will impose a tighter mercury limit than their current operating permit. OMSI's current mercury limit is 0.00028 grains per dry standard cubic foot (gr/dscf), corrected to twelve percent (12%) carbon dioxide averaged over a 24-hour rolling period. The federal and state regulations will impose a limit of 0.080 milligrams per dry standard cubic meter (mg/dscm) corrected to seven percent (7%) oxygen; or 15% of the potential mercury emissions concentration whichever is less stringent. On a tons per year basis, this will result in a decrease in allowable mercury emissions from 2.37 tons per year (for all three combustor units) to approximately 0.3 tons per year (for all three combustor units).

The data that IDEM has seen does not indicate that there is a significant difference in emissions from the burning of municipal waste alone versus the burning of a combination of municipal and medical waste. OMSI has an enforceable permit condition that allows only a relatively small amount of medical waste to be burned annually. Before and after NO_x controls, the amount of medical waste that OMSI is permitted to burn is equivalent to approximately 2.03% and 2.73% of their maximum capacity. OMSI is currently undergoing a retrofit to install control equipment for mercury and NO_x to ensure compliance with the current federal and state regulations. OMSI will be installing a carbon injection system to control mercury emissions. According to USEPA, Research Triangle Park, carbon injection is a reliable and predictable form of mercury control which results in a high control efficiency. The carbon injection system also provides additional dioxin/furan control at the facility. Research has also been done by USEPA to look into the volatility of the ash resulting from a unit equipped with a carbon injection system. As a result of the research that USEPA has done, the ash did not appear to off gas at later stages and the volatility of the resulting ash was not a concern. The mercury and NO_x air pollution controls will be in place prior to accepting medical waste at OMSI.

In an effort to regulate the mercury-containing waste (from the medical waste stream) that is sent to their Indianapolis facility, OMSI will have waste disposal agreements with hospitals and any other medical waste generators which will prohibit mercury-containing waste from being delivered to the facility. Additionally, specialized mercury detectors called "jerome meters" (or its equivalent) will be used on the first sixty (60) medical waste loads from each generator and then on a random basis prior to processing at the OMSI facility to identify the presence of mercury in the load. In the event that mercury is detected in the load, OMSI is required to reject and return the load to the generator and to work with the hospitals and medical waste vendors in question to identify and isolate the source of mercury in the waste stream.

Comment 72: Operations at OMSI

Check the capacity of the incinerating burners (permit says 2 incinerating burners that are capable of doing full steam load 186k).

Why was Marion County, Oregon data used in calculations? Would like to see OMSI 1999 stack test data used.

Are the boilers and the air pollution control equipment run at the same parameters and set points during normal operations as they are during stack testing?

Does the 662,000 tons of waste include supplemental waste?

How much special waste is Ogden burning? Is that included in the annual number (662,000)? Are we swapping municipal solid waste which is lower in SO₂ and HCl for higher?

Does OMSI have any facilities that used to burn infectious waste that no longer burn infectious waste? If so, why have they stopped taking that infectious waste?

Response 72:

The capacity of the burners has been verified and changed to 140 mmBtu per hour.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Three (3) mass burn waterwall municipal solid waste combustion units, identified as EU#1, EU#2, and EU#3, capable of burning solid waste 726 tons per day at 5200 Btu/lb, municipal solid waste only, which is equivalent to 192,440 pounds per hour of steam. In addition, a maximum of 16,180 tons of medical waste per 12 consecutive month period for all three (3) combustor units combined without a NO_x air pollution control system, and 21,681 tons of medical waste per 12 consecutive month period for all three (3) combustor units combined with a NO_x air pollution control system can be burned. The facility is equipped with medical waste handling equipment. Each combustor unit is equipped with two (2) ~~486~~ **140** mmBtu per hour natural gas fired burners used for start up, shutdown, and flame stabilization.

Calculations used in the draft permit were done using OMSI's most recent stack test data for the various pollutants. The boilers and the air pollution control equipment are run at the same parameters and set points during normal operations as they are during stack testing. Information related to stack tests at OMSI is public information and can be obtain through the IDEM - OAM.

OMSI processed in 1998 approximately 673,263 tons of waste. This number does include special waste. OMSI must receive approval from the IDEM - Office of Solid and Hazardous Waste Management (OSHWM) in order to burn special waste at their facility. The special waste burned at the facility in 1998 is estimated by OMSI to be approximately 10,250 tons. The medical waste the OMSI may burn at the facility is in addition to the municipal waste that they are permitted to burn.

OMSI believes that the comment regarding facilities that no longer combust medical waste is referring to Ogden Energy's facility in Babylon, New York. The Babylon, New York, facility is permitted to accept and process treated medical waste. According to the New York Department of Environmental Conservation, the facility has not been prohibited from processing treated medical waste by the state of New York. OMSI attributes the fact that the Babylon facility no longer accepts and processes treated medical waste to the fact that there is no market for this service. The Babylon facility could again accept and process treated medical waste if the market conditions were to improve and the facility chose to do so.

Comment 73: Hydrogen Chloride

Medical waste is high chlorine bearing. There's a great deal of HCl acid gases formed during the incineration of this material. The original size in the air pollution control equipment at Indianapolis did not take into account this waste stream. Has the air pollution vendor been contacted that supplied the original equipment to Indianapolis, and will the existing scrubber-baghouse arrangements handle this increased HCl loading on the pollution control equipment? Will this equipment remove the increased contaminant HCl's in the waste stream? What negative effects of HCl will occur with the air pollution control equipment? Has the air pollution control equipment experienced any corrosion problems presently or in the past? What is the present condition of the baghouse? What is the DP across each unit?

How will OMSI measure the high HCl concentration in the flue gas now? Are they going to use SO₂ as a surrogate? OMSI has failed stack tests in Florida, Haverhill, [and] Onondaga using SO₂ as a surrogate for HCl.

State of California mandated that slurry flow be used to monitor the pollutants, HCl, in the gas stream. Is there a plan to do that with IDEM?

Has OMSI ever failed any other SO₂ or related HCl stack testing? Have they failed a stack test using SO₂ as a surrogate for HCl. Lake County is referred to as successful. Lake County failed stack testing for HCl in 1997. Was infectious waste being burned at that time? Where have stack test failures occurred for what parameters? Did these facilities incinerate medical waste? Were they forced to install HCl monitors with reliability requirements?

Has OMSI suggested the use of HCl monitors to monitor this material? Will IDEM require reagent flow monitoring? Montgomery County facility has successfully installed HCl monitors with a reliability requirement and they have approximately six (6) years of run time on those. Suggestion to require installation of monitors.

If OMSI plans to run all three (3) atomizers on lime slurry to scrub high HCl, this will have a major impact on three (3) items. Baghouse operation, combustion, and ash characterization. Overdosing of the flue gas with the lime slurry will create extremely high differential pressures across the bags in the baghouse and will be above design parameters. This blinds the bags. This will reduce particulate removal capabilities. These baghouses will negatively impact on combustion, impacting on carbon monoxide and temperature.

Response 73:

The data that IDEM has seen does not indicate that there is a significant difference in emissions from the burning of municipal waste alone versus the burning of a combination of municipal and medical waste. Therefore, due to the fact that the emissions do not significantly increase when burning medical and

municipal waste together and the fact that the amount of medical waste that the Indianapolis facility will be allowed to burn is approximately 2.0-2.8% of the facility's total capacity, it does not appear that the burning of medical waste in combination with municipal waste would have a significant impact on the air pollution control equipment at the Indianapolis facility.

In the October, 1995, Municipal Waste Combustion Background Information Document, USEPA states that the required SO₂ CEMS will provide an indication of HCl control. Data that USEPA had seen indicated that HCl is preferentially removed. Therefore, high levels of SO₂ removal would indicate high levels of HCl removal. The document goes on to say that the USEPA believes that based on information received HCl CEMS will be available in the future. The USEPA has not yet published procedures for HCl CEMS. However, when these procedures are published, USEPA indicates that they will require them where appropriate.

According to Ogden, some of their facilities in the United States have had instances where HCl stack test failures occurred. In all cases, the cause of the failure was identified and corrected. On retest, the unit(s) passed the HCl stack test. Ogden's findings have been that the processing of medical waste was not attributable to the HCl stack test failure. The USEPA has not issued equipment performance specifications for HCl continuous emission monitoring equipment. Continuous emission monitoring equipment for HCl is not required under 40 CFR 60, Subpart Cb. Due in part to the fact that the amount of medical waste that will be allowed to be burned at the OMSI facility is relatively small, the OAM is not requiring OMSI to install a HCl monitor.

Ogden's Montgomery County, Maryland, facility is equipped with HCl monitors. The monitors were installed as part of that facility's requirements in their permit to construct. The monitors were not installed as a result of any compliance issues or problems.

Comment 74: Air Deposition

Belief that there is a part of the Clean Air Act (section 112) that speaks to air deposition and how it affects water quality. Look into that and see if that is applicable for Indiana lakes, rivers, and streams, especially in Marion County.

There are fish bans on every single water in the entire State of Indiana from mercury. This is another source of mercury (medical waste) that we need to be controlling. Why are we approving a technology that is not the best available and economically useable?

If the streams are all in violation of mercury, and if in fact the significant, major, if not total, source of mercury is in air deposition, and if in fact we know what the sources are, how can we issue a permit that allows that violation to continue? How can you issue an air permit that you know, you have reasonable cause to believe, will in fact cause a water violation? Is this not a violation of the Clean Water Act?

We are again in Indiana doing the minimum that the Feds require. There is technology available. You can today take medical waste and treat them and have zero emissions.

Response 74:

The current mercury emissions from the burning of medical waste are coming from predominately old, uncontrolled medical waste incinerators. The mercury and other emissions that would be coming from the OMSI facility as a result of the medical waste stream being shifted would have previously been emitted in uncontrolled facilities. Therefore, the burning of medical waste at the OMSI facility would not be the creation of a new emissions, but the shifting of emissions. The advantage of burning the medical

waste at the OMSI facility is that the units at the OMSI facility will have more controls and stricter limits than the medical waste incinerators do have or will have. Any effect that the burning of medical waste did or would have on the waterways of Indiana would not increase from the waste being burned at the OMSI facility. Section 112(f), (m), (n), (o), and (p) of the Clean Air Act speak to researching the health and environmental effects of various pollutants. These provisions of the Clean Air Act do not, however, require this specific type of investigation as part of an individual permit decision at this time, but rather industry or region-wide investigation and research at various times after the promulgation of the Clean Air Act and its amendments.

Indiana currently has a PSD significance level threshold for mercury that is not required by the Federal law. This significance level is 0.1 tons per year. The permit requires OMSI to take measures to prevent mercury-containing waste from the medical waste stream from entering the OMSI facility. The carbon injection mercury control that is to be installed at the OMSI facility has been described as reliable and predictable with a high control efficiency by the USEPA. Exploring other technologies for the incineration of medical waste goes beyond the scope of the permit review requirements under 326 of the Indiana Administrative Code.

Upon further review, the OAM has decided to make the following changes to the permit.

A portion of 40 CFR 60.58b, Subpart Eb, and 326 IAC 11-7-7 were omitted from the draft permit. This language has been added.

D.1.11 Compliance and Performance Testing [326 IAC 11-7-7] [40 CFR 60, Subpart Cb]

(g) Dioxin/Furan

- (5)** Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (g)(3) above, according to one of the schedules specified in paragraphs (g)(5)(i) through (g)(5)(ii) below.
 - (i)** For affected facilities, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.)
 - (ii)** Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 15 nanograms per dry standard cubic meter total mass, corrected to 7 percent oxygen, for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence **(e.g., unit 1, unit 2, unit 3, as applicable)**. **If each annual**

performance test continues to indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter corrected to seven percent (7%) oxygen, the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter corrected to seven percent (7%) oxygen, performance tests thereafter shall be conducted annually on all affected facilities at the plant until all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter corrected to seven percent (7%) oxygen.

The following conditions were added to the permit in an effort to ensure that mercury-containing waste would be reduced from the medical waste stream at OMSI.

D.1.16 Mercury Containing Waste

Prior to accepting medical waste from a medical waste generator, Ogden Martin Systems of Indianapolis, Inc., shall enter into waste disposal agreements with all medical waste generators stating that mercury containing waste is prohibited and will not be accepted at the Indianapolis Resource Recovery Facility. Every waste disposal agreement shall include a list of common mercury-containing items. The list of mercury-containing items shall include those listed below at a minimum.

Common mercury-containing items include, but are not limited to:

- Thermometers (silver-colored liquid inside)
- Thermostats (nonelectronic)
- Fluorescent and other mercury vapor lighting (high intensity discharge - HID, metal halide, high pressure sodium and neon bulbs)
- Gauges (barometers, manometers, blood pressure and vacuum gauges with silver-colored liquid)
- Batteries (mercuric oxide and some alkaline batteries)
- Paint (latex manufactures before 1990, and some oil base-paints; check the label)
- Thimerosal or merbromin (in some antibacterial products)
- Elemental mercury (from labs)
- Esophageal Dilators
- Laboratory fixatives

D.1.17 Mercury Detection

Ogden Martin Systems of Indianapolis, Inc., shall utilize a jerome meter (or its equivalent) on loads from all medical waste generators for the first sixty (60) loads to assist in the detection of mercury-containing waste in the medical waste stream entering their facility. After the jerome meter (or its equivalent) has been utilized on the first sixty (60) loads from each medical waste generator, the jerome meter (or its equivalent) shall be utilized on a random basis for that particular medical waste generator. In the event that mercury-containing waste is detected in a load at the facility, OMSI shall reject and return the load to the medical waste generator. OMSI shall work with the medical waste generator in question to identify and isolate the source of mercury in the waste stream.

To document compliance with Condition D.1.14 and D.1.15, the following Record Keeping Requirement condition has been made.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.18 Record Keeping Requirements

- (b) In order to document compliance with Condition D.1.9, the owner or operator shall record and maintain the amount of natural gas combusted during each day and calculate the annual capacity factor for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.**
- (c) In order to document compliance with Condition D.1.16, the owner or operator shall maintain records of current contracts signed by all medical waste generators.**
- (d) In order to document compliance with Condition D.1.17, the owner or operator shall maintain records of the following:**
 - (1) Name of the jerome meter (or its equivalent) operator;**
 - (2) Date medical waste load tested at the OMSI facility;**
 - (3) Indication of whether or not mercury was detected in the load; and**
 - (4) Action taken if mercury was detected in the medical waste load.**
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

To ensure compliance with the Prevention of Significant Deterioration (PSD) threshold for mercury of 0.1 tons per year, the following condition regarding OMSI's carbon injection system has been added.

Compliance Determination Requirements

D.1.13 Mercury

The carbon injection system for mercury control shall be in operation and control emissions from the municipal waste combustors at all times when the facility is in operation and medical waste is being burned except as provided in 40 CFR 60.38b.

To ensure compliance with applicable limits while combusting both municipal and medical waste simultaneously, the following condition regarding an initial stack test has been added.

D.1.14 Testing Requirement [326 IAC 2-7-6(1),(6)]

- (a) Within 120 days after commencing acceptance of medical waste at the facility, Ogden Martin Systems of Indianapolis, Inc., shall perform Hg, dioxin/furan, HCl, and NOx testing on a minimum of one of the combustor units dedicated to the combustion of medical waste using methods as approved by the Commissioner, in order to demonstrate compliance with corresponding limits in Condition D.1.4.**

Compliance with NO_x emission limitation may be demonstrated using valid CEM data obtained while burning a combination of municipal and medical waste. The allowable medical waste hourly throughput shall be determined at a level 5% above the level achieved during the most recent compliance stack test.

- (b) Ogden Martin Systems of Indianapolis, Inc., will continue to perform stack tests as required by 40 CFR 60, Subpart Cb, and 326 IAC 11-7. During these tests Ogden Martin Systems of Indianapolis, Inc., shall on a minimum of one unit test for Hg, dioxin/furan, HCl, and NO_x, while combusting both municipal and medical waste to demonstrate compliance with corresponding emission limits. The allowable medical waste hourly throughput shall be determined at a level 5% above the level achieved during the most recent compliance stack test.**
- (c) In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facilities are in compliance.**

The OAM has decided to make the following changes to Condition C.8 - Compliance Monitoring to reflect the operational circumstances of this source modification and the time frame of compliance with the monitoring requirements required by the permit.

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval.

If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any newly required monitoring related to that equipment, no more than ninety (90) days after receipt of this approval prior to the acceptance of medical waste at the facility. If a previous or existing approval or applicable requirement mandates compliance monitoring, the source will continue or initiate such monitoring. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule **for newly required monitoring** an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule **receiving medical waste at the facility**, with full justification of the reasons for the inability to meet this ~~date~~ **requirement**.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

The OAM has decided to add the following condition.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of operation shall be submitted to the Office of Air**

Management (OAM), Permit Administration & Development Section, verifying the operation as proposed in the application. The modified operation covered in the Significant Source Modification approval may begin on the date the affidavit of operation is postmarked or hand delivered to IDEM if modified as proposed.

- (b) If the operational modification differs from that proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.**
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.**

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.**
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.**
- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.**

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Significant Source Modification to a Part 70 Source

Source Background and Description

Source Name:	Ogden Martin Systems of Indianapolis, Inc.
Source Location:	2320 South Harding Street, Indianapolis, IN 46221
County:	Marion County
SIC Code:	4953
Operation Permit No.:	T097-5985-00123
Source Modification No.:	097-10550-00123
Permit Reviewer:	Autumn M. Marker

The Office of Air Management (OAM) has reviewed a modification application from Ogden Martin Systems of Indianapolis, Inc., relating to the burning of medical waste at the municipal waste combustor facility. (The Office of Air Management (OAM) uses the term medical waste to describe hospital/infectious waste. As defined in 329 IAC 11, the Office of Solid and Hazardous Waste Management (OSHWM) uses the term infectious waste. For the purposes of the OAM and OSHWM approvals "medical waste" and "infectious waste" refer to the same material.)

History

On January 19, 1999, Ogden Martin submitted an application to the OAM requesting approval to burn medical waste at their existing permitted municipal waste combustion facility. Ogden Martin has not yet been issued a Part 70 permit.

Existing Approvals

The source applied for a Part 70 Operating Permit on May 31, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (b) Installation Permit, issued on March 25, 1986;
- (a) PSD (49)1602, issued on April 23, 1986;
- (c) Operation Permit, issued on May 12, 1989;
- (a) 097-9957-00123, issued on September 8, 1998 ;
- (b) 097-10133-00123, issued on October 1, 1998; and
- (c) 097-10366-00123, issued on February 17, 1999;

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 19, 1999. Additional information was received on May 5, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year) before modification	Potential To Emit (ton/year) modification only	Total Potential To Emit (tons/year)
PM	85.41	0.210	85.62
PM-10	85.41	0.210	85.62
SO ₂	566.34	2.103	440.103
VOC	43.35	0.867	44.217
CO	596.55	2.912	599.462
NO _x	1986.78	39.00	2025.78

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Lead	8.79
HCl	957.90
Mercury	2.37
TOTAL	969.06

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO₂, NO_x, and CO, are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

- (c) **Fugitive Emissions**
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	38.69
PM-10	38.69
SO ₂	371.05
VOC	8.82
CO	427.17
NO _x	1771.97

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)					
Process/facility	Particulate	SO ₂	VOC	CO	NO _x	HAPs
Combustion units 1, 2, and 3 (current permit)	85.41	566.34	43.35	596.55	1986.78	
Combustion units 1, 2, and 3 (NSPS and 326 IAC 11-7)	85.41	509.70	43.35	417.60	1430.43	

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

Proposed Modification

The proposed modification does not or will be limited to not exceed the PSD significance thresholds.

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)	Lead (ton/yr)
Proposed Modification	0.210	0.210	2.103	0.867	2.912	39.00	0.176
PSD Significance levels	25.00	15.00	40.00	40.00	100.00	40.00	0.60

Federal Rule Applicability

- (a) This municipal waste combustor facility is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Cb). Pursuant to 40 CFR 60.32b, a designated facility to which the guidelines apply is each municipal waste combustor unit located within a municipal waste combustor plant with an aggregate municipal waste combustor plant capacity greater than 35 megagrams per day of municipal solid waste for which construction was commenced on or before September 20, 1994. Designated facilities must comply with a State plan (326 IAC 11-7, Municipal Waste Combustor, effective February 17, 1999) which incorporates the limits and standards outlined in 40 CFR 60.33b, 60.34b, 60.35b, 60.36b, 60.37b, 60.38b, and 60.39b.
- (b) This municipal waste combustor facility is not subject to the New Source Performance Standard, 40 CFR 60, Subpart Ce (Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators), because 40 CFR 60.32e states that any combustor which meets the applicability requirements under subpart Cb, Ea, or Eb of 40 CFR 60 is not subject to 40 CFR 60, Subpart Ce. This municipal waste combustor facility meets the applicability requirements of 40 CFR 60, Subpart Cb, therefore, 40 CFR 60, Subpart Ce, is not applicable.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is a major source and is subject to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)). Pursuant to this rule, modifications or construction at the source that would result in an increase in emissions must stay below PSD significance thresholds for PM, PM-10, SO₂, VOC, CO, NO_x, and lead. This significant source modification limits the amount of medical waste throughput at the source to 16,180 tons per 12 consecutive month period which limits the NO_x emissions from the medical waste stream to 39 tons per year. The remaining pollutants, PM, PM-10, SO₂, VOC, CO, and lead, have potential emissions below the PSD significance levels.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of NO_x, CO, and SO₂. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326

IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Municipal waste combustor units

326 IAC 11-7 (Municipal Waste Combustor)

The municipal waste combustors are applicable to 326 IAC 11-7 (Municipal Waste Combustor) because it has a combustion capacity greater than two hundred fifty (250) tons per day of municipal solid waste for which construction commenced on or before September 20, 1994.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The three (3) municipal waste combustors, burning either municipal or medical waste or a combination of the two, have applicable compliance monitoring conditions as specified in 40 CFR 60, Subpart Cc.

- (1) **Particulate** - Following the date that the initial performance test for particulate matter is completed or is required to be completed under 40 CFR 60.8 of subpart A of this part for an affected facility, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test).
- (2) **Opacity** - The owner or operator of an affected facility shall install, calibrate, maintain,

and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified. Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 of subpart A for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (c)(6) of this section.

- (3) **Cadmium and Lead** - Following the date of the initial performance test or the date on which the initial performance test is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission limits for cadmium and lead on an annual basis (no more than 12 calendar months following the previous performance test).
- (4) **Mercury** - Following the date that the initial performance test for mercury is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on an annual basis (no more than 12 calendar months from the previous performance test).
- (5) **Sulfur Dioxide** - Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under 40 CFR 60.8 of subpart A of this part, compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in appendix F of 40 CFR 60.
- (6) **Hydrogen Chloride** - Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- (7) **Dioxin/Furan** - Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8 of subpart A, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions as specified, according to one of the following schedules: (i) For affected facilities, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.) (ii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 7 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence.
- (8) **Nitrogen Oxides** - Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under 40 CFR 60.8 of subpart A of this part, compliance with the emission limit for nitrogen oxides required under 40 CFR 60.52b(d) shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.

Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in appendix F of 40 CFR 60.

- (9) **Carbon Monoxide** - Compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified.
- (10) **Fugitive Ash** - Following the date that the initial performance test for fugitive ash emissions is completed under 40 CFR 60.8 of subpart A of this part for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- (11) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR 60.53b(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages. For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved. Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in appendix F of 40 CFR 60.

These monitoring conditions are necessary because to ensure compliance with the guidelines outlined in 40 CFR 60, Subpart Ce, and 326 IAC 11-7 (Municipal Waste Combustors).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this municipal waste combustor facility shall be subject to the conditions of the attached proposed **Significant Source Modification No. 097-10550-00123**.

Appendix A

Emission Calculations

Company Name: Ogden Martin Systems of Indianapolis, Inc.
Plant Location: 2320 South Harding Street, Indianapolis, IN 46221
County: Marion County
Permit Reviewer: Autumn M. Marker
Modification #: 097-10550
Pit. ID #: 097-00123

Maximum capacity for three units
726 tons/day * 3 units = 2,178 tons/day

Accepting medical waste up to 15% of capacity.
326.7 tons/day of medical waste

Assuming no increase in emissions from the burning of medical waste, emission rates from the latest stack test data from the Indianapolis facility will be used to determine the increase in emissions from the new waste stream.

The following pound per ton emission rates are based on 1995 Stack test data from Ogden Martin - Indianapolis. The stack test was performed at 96.4% capacity. The results of the stack test (burning municipal waste only) in pounds per hour were converted to pounds per ton. SO2 emission rate was an average taken from monthly reporting from CEM data.

Particulate	0.026 lb/ton	Capacity:	30.25 tons/hr
SO2	0.26 lb/ton	96.4% of cap:	29.16 tons/hr
NOx	4.82 lb/ton		
Pb	1.6E-05 lb/ton		
Hg	1.89E-04 lb/ton		
CO	0.36 lb/ton		

Potential emissions from proposed burning medical waste at 15% of total capacity

Pollutant	Rate (ton/day)	Emission Factor (lb/ton)	Emissions before controls (ton/yr)	Control Equipment
Particulate	326.64	0.026	1.5499068	Baghouse
SO2		0.26	15.499068	Hydrated Lime Slurry
NOx		4.82	287.328876	None
Pb		1.6E-05	0.0009537888	
Hg		1.89E-04	0.0112666302	
CO		3.60E-01	21.460248	

Limit the source would need to stay under PSD significance levels

Pollutant	Rate (ton/day)	Emission Factor (lb/ton)	Emissions before controls (ton/yr)	Control Equipment
Particulate	44.33	0.026	0.21034585	Baghouse
SO2		0.26	2.1034585	Hydrated Lime Slurry
NOx		4.82	38.9948845	None
Pb		1.6E-05	0.000129444	
Hg		1.89E-04	0.001529053	
CO		3.60E-01	2.912481	

PSD Significance Level

PM	1.55	25
PM-10	1.55	15
SO2	15.5	40
NOx	287.33	40
VOC		40
CO	21.46	100
Lead	0.00095	0.6

Controlled Emissions

PM	0.21	25
PM-10	0.21	15
SO2	2.1	40
NOx	39	40
VOC		40
CO	2.912	100
Lead	0.00013	0.6

Current permit limits (for one unit)

(12% CO2)		(7% O2)				Tons per year for 3 units
CO	135 ppmdv	CO	142 ppmdv	45.4 lb/hr	198.85 ton/yr	596.55 ton/yr
PCDD/PCDF		PCDD/PCDF				
PM	0.01 gr/dscf	PM	0.011 gr/dscf	6.5 lb/hr	28.47 ton/yr	85.41 ton/yr
Cd		Cd				
Pb	0.001 gr/dscf	Pb	2.4 mg/dscm	0.67 lb/hr	2.93 ton/yr	8.79 ton/yr
Hg	0.00028 gr/dscf	Hg	0.67 mg/dscm	0.18 lb/hr	0.79 ton/yr	2.37 ton/yr
SO2	30 ppmdv	SO2	32 ppmdv	43.1 lb/hr	188.78 ton/yr	566.34 ton/yr
HCl	30 ppmdv	HCl	32 ppmdv	72.9 lb/hr	319.3 ton/yr	957.9 ton/yr
NOx	272 ppmdv	NOx	286 ppmdv	151.2 lb/hr	662.26 ton/yr	1986.78 ton/yr

NSPS limits (for one unit)

				Tons per year for 3 units
CO	100 ppmdv	31.78 lb/hr	139.2 ton/yr	417.6 ton/yr
PCDD/PCDF	30 ng/dscm			
PM	0.01 gr/dscf	6.5 lb/hr	28.47 ton/yr	85.41 ton/yr
Cd	0.04 mg/dscm			
Pb	0.44 mg/dscm	0.12 lb/hr	0.526 ton/yr	1.578 ton/yr
Hg	0.08 mg/dscm	0.022 lb/hr	0.0964 ton/yr	0.2892 ton/yr
SO2	29 ppmdv	38.79 lb/hr	169.9 ton/yr	509.7 ton/yr
HCl	29 ppmdv	65.61 lb/hr	287.37 ton/yr	862.11 ton/yr
NOx	205 ppmdv	108.86 lb/hr	476.8 ton/yr	1430.43 ton/yr

Emission Calculations

Company Name: Ogden Martin Systems of Indianapolis, Inc.
Plant Location: 2320 South Harding Street, Indianapolis, IN 46221
County: Marion County
Permit Reviewer: Autumn M. Marker
Modification #: 097-10550
Plt. ID #: 097-00123

Potential emissions operating at maximum capacity 8,760 hours/year

Pollutant	Rate (ton/day) 2178	Emission Factor (lb/ton)	Emissions before controls (ton/yr)	Control Equipment
Particulate		0.026	10.33461	Baghouse
SO2		0.26	103.3461	Hydrated Lime Slurry
NOx		4.82	1915.8777	None
Pb		1.6E-05	0.00635976	
Hg		1.89E-04	0.075124665	
CO		3.60E-01	143.0946	

Potential emissions from operating at 100% capacity and adding an additional 1.847 tons/hour of medical waste

	2,178 tons/day municipal	44.33 tons/day medical	Total combined municipal and medical
Particulate	10.33	0.21	10.54
SO2	103.35	2.10	105.45
NOx	1915.88	39	1954.88
Pb	0.0064	0.00013	0.00653
Hg	0.075	0.0015	0.0765
CO	143.09	2.91	146

Potential emissions with NOx controls operating to meet the NSPS standard

In order to meet the NSPS standard of 205 ppmv for NOx (approximately 1430.43ton/yr), the Indianapolis facility would need to install and operate a NOx control system with at least an efficiency of 25.36%.

Pollutant	Rate (ton/day) 2178	Emission Factor (lb/ton)	Emissions before controls (ton/yr)	Emissions after controls (ton/yr)	Control Equipment	Control Efficiency
Particulate		0.026	10.33461	10.33461	Baghouse	
SO2		0.26	103.3461	103.3461	Hydrated Lime Slurry	
NOx		4.82	1915.8777	1430.01111528	SNCR	25.36%
Pb		1.6E-05	0.00635976	0.00635976		
Hg		1.89E-04	0.075124665	0.075124665		
CO		3.60E-01	143.0946	143.0946		

If NOx emissions from the additional medical waste are estimated using the calculated control efficiency established above, the amount medical waste that could be burned and still keep NOx emissions under the PSD significance level would increase.

Pollutant	Rate (ton/day) 59.4	Emission Factor (lb/ton)	Emissions before controls (ton/yr)	Emissions after controls (ton/yr)	Control Equipment	Control Efficiency
Particulate		0.026	0.281853	0.281853	Baghouse	
SO2		0.26	2.81853	2.81853	Hydrated Lime Slurry	
NOx		4.82	52.25121	39.000303144	SNCR	25.36%
Pb		1.6E-05	0.000173448	0.000173448		
Hg		1.89E-04	0.0020488545	0.0020488545		
CO		3.60E-01	3.90258	3.90258		